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## INTRODUCTION

[1] This case is about Mr and Mrs Es' house at XXXX, XXXX. The house is an architecturally designed building set on a terrace, high on the Port Hills. The design and layout are designed to make the most of the striking views north and west, across the plains to the Southern Alps.

[2] This case is a complicated one. The house was built in 1999, and there were changes in specification of various building elements from the original consent, however, not all changes were documented. The house had some issues with water ingress before the earthquakes. The house sustained significant damage during the 22 February 2011 Port Hills earthquake.

[3] The earthquake damage was assessed and repaired through IAG's Managed Repair Programme (the Programme). This involved project management by Hawkins, with the work carried out by the second respondent, then known as Falcon Residential Limited (Falcon). The full extent of the damage identified was not captured by the scope of works. Moreover, the repairs themselves were inadequate to address the damage and were poorly executed. Problematically, no consent, or exemption from consent, for the work was applied for and so there are few records of the damage, and little documentation of the nature and extent of the repairs.

[4] Many of the repairs have since failed or were never of sufficient quality to meet the requirements of the policy or the building legislation. The issues with pre-existing water ingress have been complicated by failed and defective repairs to stucco and brick cladding which have affected the performance of the building's weatherproofing. Moreover, it has become apparent that there was earthquake damage which was not identified, scoped, or repaired by IAG or Hawkins.

[5] Mr and Mrs E say that the defective repairs are such that the entire house needs to be re-clad and re-roofed, and that any water damage to framing, apart from in a few areas, was either minimal or has resulted from the failed repairs. It is alleged that both the earthquake damage and the work to remediate defective repairs is such that consent for this work are and were required. They say that consent requirements mean that the cladding must be upgraded to a cavity backed system, a cost which is captured by the policy. It is alleged that IAG

breached the contract of insurance, therefore, the cost of remedying the un-scoped earthquake damage, the defective repairs, and any resulting damage, can be recovered as compensatory damages.

[6] IAG accepts that it bears liability for repairing the un-scoped earthquake damage and rectifying the defective repairs, as set out in *Sleight v Beckia*.<sup>1</sup> This includes an acceptance that the pitched roof must be replaced. However, IAG says that the defective repairs can be addressed by targeted remediation, rather than a re-clad. IAG believes that the house suffered from significant water damage due to defects in the original construction, which are excluded from cover under the policy. This means that any additional damage resulting from the defective repairs is minimal and cannot be attributed to IAG.

[7] Hawkins was put into liquidation on 5 July 2018, and QBE, Hawkins' liability insurer is a party joined under the Law Reform Act 1936. Shortly before the hearing, QBE settled IAG's claims against it. On the first day of the hearing IAG and QBE applied for QBE to be removed from the application. Mr and Mrs E consented to QBE being withdrawn. I allowed the request as *Sleight* makes it clear that IAG is the first stop for liability for defective or incomplete repairs under a "to pay" insurance policy. As IAG had settled its liability with QBE there was no good reason to continue QBE's involvement, which would have complicated and prolonged the hearing.

[8] In summary, I find that apart from in two distinct areas, the evidence shows that the pre-earthquake water ingress has not caused damage which requires remediation. Rather the defective repairs are such that all brick cladding, some window joinery and large sections of the stucco cladding must be replaced along with other areas where remediation work is required. The issues faced by Mr and Mrs E are complicated by the remarkable absence of records of assessments and repairs, an absence which has complicated my deliberations. The reasons for the lack of records is also why the repairs were defective and inadequate; there was a lack of oversight in the form of effective project management. As found in *Sleight* IAG bears ultimate responsibility for this deficiency.

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<sup>1</sup> *Sleight v Beckia Holdings* [2020] NZHC 2851.

## BACKGROUND

### The House

[9] The house was built for Mr and Mrs E in 1998-1999, on a redeveloped site, formerly the location of the Coronation Hospital. The house was designed by Royal Associates Architects, with engineering design by Frederick Smith, and was built by Weib Roffel Builders. As was common at the time, there was no project manager, but Mrs E worked closely with Mr Roffel on the build. It is clear from the site, appearance, layout, and quality of the design that the house was intended as a high-quality dwelling. The specifications, use of an architect, choice of materials, and Mrs E's close involvement in the build show that aesthetics were important. By all accounts the house was well built.

[10] The house has an open chevron-shaped footprint, with a two-story central block, containing the master bedroom, en-suite, study upstairs, and a lounge and entrance hall downstairs. The central block is connected to west and east blocks by galleries which are glazed on their north sides. The west block contains bedrooms, the laundry, and the bathroom. The west block is a pitched roof structure separated from the pitched roofed garage by the extension of the flat roofed gallery which contains the laundry. The east gallery is flat roofed and contains a hallway and dining room. The east block is a double height space with an open plan kitchen and an adjoining glazed conservatory. The house is laid out so that most rooms look north to the mountains. A layout of the house is shown at figure 1 with significant features indicated. The exposures which provide the spectacular views, also means the house is located in a very high wind zone.

[11] The house has a variety of structure and cladding types. The central block has concrete blockwork for the first floor, and timber framing above. The rest of the house is timber framed. The cladding is a mix of 110 series brick veneer, and three coat plaster system stucco over 12mm H3 ply and building paper. There are a number of large windows, particularly on the northern aspects. The original bricks were recycled bricks from the old Farmers building (and other sources), chosen for aesthetic reasons. The roof is Monier concrete tile on pitched areas and butynol over ply on the flat roofed areas.<sup>2</sup> There were some changes from the original specifications either before or during construction.

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<sup>2</sup> Above both galleries, the west block hallway, laundry and bathroom, and the roof areas above the double height brick areas on the central block.

[12] The design of the house is reasonably complex, with many junctions between different cladding and roofing types, and between various architectural features. Those features include parapet wall to roof junctions which have been identified as being at high risk of moisture ingress. Prior to the earthquakes Mr and Mrs E noted no issues with water ingress apart from a small leak in the kitchen roof, which was repaired, and water blown into the south facing entrance hallway following a southerly storm.

### **The Earthquakes**

[13] The house suffered a small amount of damage from the 4 September 2010, Darfield earthquake, for which a claim with EQC was made. By all accounts the cladding elements of the house, which form the bulk of my considerations, survived this event with little or no damage.

[14] The 22 February 2011, Port Hills earthquake was another matter. It has been estimated that the site suffered a peak ground acceleration (PGA) of 0.39g, in excess of the approximate shaking force of a one in 500-year earthquake. A properly designed and constructed building should survive a ULS event without collapse, although it may be otherwise irreparably damaged.

[15] The damage was substantial and included:

- (a) extensive cracking of brickwork, and mortar, including shear cracking through individual bricks, and bricks displaced from sills;
- (b) cracking and spalling of stucco;
- (c) extensive cracking and displacement of Gib board linings, including diagonal cracks across sheets, and a partial ceiling collapse in the master en-suite area;
- (d) differential settlement and cracking to the floor slab;
- (e) cracked floor tiles;
- (f) cracked aluminium window joinery;

- (g) displaced, cracked and chipped roof tiles;
- (h) displaced guttering and spouting;
- (i) the rotational failure of the west retaining wall; and
- (j) the racking from plumb of the gable end framing in the kitchen/ dining area.

[16] There were concerns about the safety of the house, due to damage to the brickwork on the central block, so Mr and Mrs E spent a period with relatives and at another property. Claims were made to EQC and IAG for the damage. Weib Roffel attended to put tarpaulins over the roof to prevent leaks. Temporary repairs to the roof using unmatched second-hand tiles were carried out by EQC and temporary bracing was installed on the double height brickwork, due to concerns that the brick-ties had failed.

[17] Due to delays in EQC assessing the damage, IAG carried out its own assessment prior to EQC. The assessment records that an estimated 98% of the damage was attributed to the Port Hills event, and repair estimated at \$759,780.00. The condition of the house (but for the earthquake damage) is recorded as “*excellent*”.

### **The Repairs**

[18] Mr and Mrs E were identified as candidates for the Programme. The Programme was a response to the high demand for qualified builders and trades which had led to cost escalations, excessive delays, and problems finding builders. IAG and its project management “partner” Hawkins, would identify and appoint the builder, Hawkins would oversee the works, and IAG would pay the builder.<sup>3</sup> The services under the Programme were not something which IAG was obliged to provide as part of its policy obligations. IAG’s involvement was voluntary and it has characterised the Programme as being undertaken purely to help its customers. However, there were aspects which were beneficial for IAG. The programme allowed it to control costs, retain access to builders, and importantly, faster claims resolution reduced uncertainty around claims reserves; an important factor for underwriters and re-insurers.

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<sup>3</sup> In fact, acting as IAG’s agent.



[19] In August 2012, an IAG Loss Adjuster, Mark Bone, and a Hawkins Rebuild Solutions Manager, Mike Toohey were appointed. Falcon was nominated by Hawkins to carry out the repair. Mr and Mrs E were not given a choice of builder. A meeting was held on 23 August 2012, involving Mr and Mrs E, Mr Bone, Mr Toohey and Falcon representatives. Mr and Mrs E say that they were assured that Falcon was a “*really good builder*” and were given a time frame for the repairs.

[20] A scope of works was prepared by Mr Toohey. Mr and Mrs E provided their comments on the scope on 7 September. On 12 September 2012 EQC finalised its settlement and the claim was declared over cap. The scope was finalised on 31 October 2012 (the form 720) estimating repairs worth \$276,866.69, and a building contract (the Contract) was prepared. The Contract is a variation on a Master Builder’s form with additional terms prepared by Hawkins and IAG. On 29 November 2012, the Contract was signed by Mr E and Mr Hobbs of Falcon.

[21] The work on the repairs began in or around February 2013. An exemption from consent was granted for the replacement of the west retaining wall. Over the course of the repairs there were 44 variations from the form 720 scope, which resulted in a 25% price uplift. Mr and Mrs E took the opportunity to do additional work at their own expense. This included the placing of extra insulation to the south wall of the kitchen, and (on the advice of an engineer who attended with Falcon) installing rafter beams and Gib linings to lower the roof in the master bedroom, apparently to provide better bracing.<sup>4</sup>

[22] The scoped work and variations relevant to the issues before me are:

- (a) the east retaining wall was replaced;
- (b) approximately 75% of the Gib wall linings were replaced;
- (c) all brick claddings were removed and replaced;
- (d) 28 sq/m of stucco was originally scoped for “[r]epair crack and plaster” and all stucco was to be re-painted. There were then variations for additional

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<sup>4</sup> The structural engineers who gave evidence concluded that this work was not in fact necessary.

plasterwork, and to “[r]emove cladding, replaster and paint gable end”. An email to Mr Toohey from Kirk Danger, Falcon’s project manager on 7 May 2013 records “[p]laster repairs and painting to plaster areas went from patch cracks to covering all areas”<sup>5</sup>;

- (e) the downstairs bathroom was retiled, and the waterproof membrane replaced;
- (f) the windows at the north end of the master bedroom were replaced, requiring plaster to be ground out for flashings; and
- (g) allowance was made for the roof and spouting to be inspected, and tiles were recut and refitted at the central block south west parapet and skylight.

[23] The work did not go smoothly. Falcon was struggling with the volume of contracts it had taken on. There was a lack of project management. Mrs E visited the site often and was justifiably vocal regarding issues. As early as March 2013, there were emails from Mr Danger to Hawkins and IAG with concerns about timing issues and complaints about Mrs E’s attendance on site. The response to a very long and detailed email sent by Mr Danger, on 7 May 2013, running over a number of pages, was a single line from Brian Audas, IAG’s Loss adjuster “[t]hanks for the update. Did you get the wallpaper sorted?” The issues and delays were not resolved.

[24] From the schedule of progress payments, it appears that the brick work was completed in March and April 2012, as were most of the stucco repairs. However, additional stucco work was invoiced in January and February 2014, and the re-plastering of a gable end was invoiced in July 2014. It is unclear which of the four gable end walls was involved.

[25] Practical completion was signed off on 9 December 2013. Mr and Mrs E say this was done under duress. There was a significant snag list. The issues were dealt with but for the east retaining wall which was not resolved by Falcon. IAG issued Falcon with a non-conformance notice for the east retaining wall on 12 November 2014.

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<sup>5</sup> Although unhelpfully this is not broken down between interior and exterior.

[26] The east retaining wall work was then taken over by Z-Build on a direct contract with IAG. The repairs were completed in April 2015. However, there were issues with the whaler plates, which secured the wall to soil nails, and apparently no drainage was installed. After the first rainfall, fill above the wall began to slump.

[27] IAG contracted directly with 1Geotechnical, which rectified the issues with the east retaining wall, with the work completed after February 2016. However, the wall, which sits above a decked area is visibly different to the undamaged west retaining wall, has long steel soil nails protruding, and is secured by heavy galvanised steel whalers, which have a heavy industrial appearance.

[28] On 14 February 2016, the house was damaged during the magnitude 5.7 Valentine's day earthquake. This resulted in cracked Gib throughout the house. The repairs to this damage and the issues which it raises are discussed below.

[29] In 2016 Mr and Mrs E decided to sell the house. A real estate agent recommended that they obtain a building report. Four Corners Home Inspections carried out an inspection and issued a report, dated 27 February 2017. The report identified issues with gaps at stucco and joinery junctions, unfinished stucco at spouting stop-ends, cracked stucco, and a loose brick. The report notes that "[t]he exterior was generally in good condition". It was recommended that a moisture ingress report was conducted to see if the stucco cracks were allowing water ingress.

[30] As the Four Corners report raised the possibility of water ingress, Mr and Mrs E retained a Building Surveyor, Mr Philip Tolley to assess. His first report dated April 2017, highlights issues which are discussed below. Invasive testing was recommended. Mr Tolley was retained to produce a second report. He conducted invasive and destructive investigations taking timber samples and using an endoscope camera to inspect the cladding where possible. The samples were sent for laboratory testing. A second report dated 6 June 2017 was produced. The laboratory findings and the results of Mr Tolley's invasive testing are discussed below. Mr Tolley concluded that the house required a full re-clad, due to defective earthquake repairs.

[31] The report was forwarded to IAG. IAG initially considered that it had no liability for the defective repairs, as it was not a party to the building contract. However, it offered to assist with Mr and Mrs E s' negotiations with Falcon. After a period during which negotiations were attempted through the Greater Christchurch Claims Resolution Service (GCCRS) this application was filed.

## **EVIDENCE**

### **Documentary evidence**

[32] Reviewing the documentary evidence of the repairs, I observe that:

- (a) Despite the size and complexity of the house and the extent of the damage, there is very little evidence of pre-repair assessments of the earthquake damage. Normally there would be engineers', loss adjusters' and builders' reports on the extent of the damage to a dwelling, here there is little of this. The most useful pre-repair reporting is a set of photos taken by Miyamoto which captured the visible evidence. However, as these were taken at ground level, they lack significant detail.
- (b) Despite \$347,464 worth of repair work being completed over a three-year period there is a very sparse record of those works. Most of the correspondence about the repairs relate to the retaining wall, and an early issue about whether the custom kitchen joinery could be repaired.
- (c) The only records of the brick repairs are line items in milestone payment schedules, a mention in an email of the difficulties presented by the octagonal conservatory, and the name of the contractor on a list of subcontractors.
- (d) There is slightly more detail for the stucco, as there is a producer statement and record of works, as well as the variation detail referred to at [22]d above. However, there are no records of what other parts of the house were repaired, and whether those repairs were simply a repaint, involved cracks being filled, or a re-skim of plaster.

- (e) The roof work done appears only to relate to a single area of parapet and skylight on the south west of the central block.

## **Witnesses**

[33] This matter was heard over six days. Four witnesses of fact gave evidence of their experiences relevant to this matter:

- (a) Mr and Mrs E – homeowners.
- (b) Paul Clapp – IAG Claims Consultant, who oversaw the claim from November 2012 to July 2015. Mr Clapp also has experience of the IAG earthquake claims process in that period, and subsequently of non-earthquake claims.
- (c) Nicholas Groufsy – IAG Claims Technician, who has been involved in the claim since March 2018. Mr Groufsy has 9 years’ experience handling earthquake claims at IAG as a claims handler at first instance, and in more senior roles with responsibilities for oversight and audit of files where issues have arisen. His insights were of value.

[34] Expert opinion evidence was also heard. Expert witnesses are retained by the parties. However, the duties of any expert providing evidence are to the Court or Tribunal, not to their instructing party. Generally, in this Tribunal, experts with relevance to an area or topic (for example structural engineering) are sworn in together to give their evidence simultaneously.<sup>6</sup> When an expert faces challenges to their evidence, it may be more appropriate for them to be sworn in alone. In this case pre-hearing expert conferrals were facilitated by experts appointed by the Tribunal; Bruce Milsom, building surveyor, and Steven Knowles, structural engineer. Mr Milsom and Mr Knowles were not sworn in as witnesses but sat with me during the hearing providing insight, analysis and assisting in testing the experts evidence.

[35] The experts before me were:

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<sup>6</sup> This process, known as “hot-tubbing” means technical evidence is heard in a manner which allows the experts to challenge each other’s evidence, rather than trusting that a lawyer or Tribunal member sufficiently understands the subject matter with sufficient depth to adequately test an expert’s opinion.

- (a) Mr Tolley, Stuart Wilson, and Steven Davison, building surveyors. They were retained respectively by; Mr and Mrs E, QBE and IAG. They have all provided written reports and participated in the joint conferral process which was facilitated by Mr Milsom. All three are well qualified, both academically, and through experience in the construction industry. All have extensive experience in assessing leaky and earthquake damaged buildings and are members of the New Zealand Institute of Building Surveyors.
- (b) Mark Flewellen, and Robert Wason – plaster cladding experts. They were retained respectively by Mr and Mrs E , and IAG. Mr Flewellen is the National Technical Manager at Resene Construction Systems, and Mr Wason is the Architectural Manager at Stoanz Ltd. Both are involved in the provision of specialist plaster cladding systems, and both are well qualified to provide evidence on the stucco repairs, and the technical aspects of remediating the stucco.
- (c) Matthew Tracey - building surveyor. Mr Tracey was retained by IAG. Mr Tracey prepared a crack-map of the cracking to the stucco that has appeared since the repairs. His evidence was challenged by Mr Johnstone. Mr Tracey is an experienced building surveyor and was qualified to put forward his expert observations.
- (d) Carl Pickering – architect. Mr Pickering is the architect retained by Mr and Mrs E to manage the remediation works and to prepare detailing. His evidence was challenged by Mr Cuff. Mr Pickering is professionally qualified and previously worked in roles as a tradesman and technician. He has experience of earthquake and leaky home repairs. Mr Pickering was sworn in with Messrs Tolley, Wilson and Davison, and later with Messrs Flewellyn and Wason. However, he sat apart and only contributed on those areas where his expertise was relevant. He later gave evidence alone.
- (e) Kevin Simcock and Matthew Harris – structural engineers. They were retained respectively by Mr and Mrs E, and IAG. They have both provided written reports and participated in the joint conferral process which was facilitated by

Mr Knowles. Both are Chartered Professional Engineers and are well qualified to comment on the issues in this case, having been involved in large numbers of earthquake repair cases. Mr Simcock additionally has extensive experience with technical aspects of plaster cladding systems, although his evidence was largely restricted to structural matters.

- (f) David Whyte and John Creighton – Builders. They were retained respectively by Mr and Mrs E, and IAG. Both are experienced builders with knowledge of hill site issues and earthquake repairs. Mr Whyte also has experience with remediating leaky buildings. Messrs Whyte and Creighton were sworn in with Grant Moore, and Heidi van Eeden – Quantity Surveyors, who were retained respectively by Mr and Mrs E, and QBE. Both Mr Moore and Ms van Eeden are experienced and well-qualified quantity surveyors, with experience relevant to the case before me.

### **Challenges to and weighting of evidence**

[36] There were challenges made to the evidence of various witnesses, and to documents which the parties sought to produce. When considering these challenges, much the legal commentary and case reports are based on the Evidence Act 2006, the High Court Rules, or the District Court Rules. This Tribunal is not subject to that legislation or those rules. My decisions on the challenges to evidence are informed by the decisions in previous Court cases but filtered through the over-riding requirements of natural justice and efficiency.<sup>7</sup>

[37] Documents are admissible provided their contents are relevant to the issues, they are reliable, and they have been fairly produced. The last criterion ensures that the party producing the document is not gaining an unfair advantage by producing a document at the last minute without allowing the other party time to prepare. The normal rule is that all relevant documents are exchanged well before a hearing. In this case there were a number of documents introduced during the hearing to which objections were made. I dealt with the objections by making oral decisions during the hearing. These are discussed below where relevant.

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<sup>7</sup> See Canterbury Earthquakes Insurance Tribunal Act 2019, ss 3 and 20.

[38] In the normal course, a witness cannot provide opinion evidence to a decision maker. Reaching conclusions on the significance of events is the role of the decision maker, not the witnesses. An exception to this is when the witness can show they are qualified as an expert, by experience, study, or both, and have deeper understanding which makes their opinion useful to the decision maker.<sup>8</sup> Expert witnesses can give opinion evidence provided they meet the criteria that they are qualified, and that they can provide substantially helpful opinions.

[39] The objections, discussed in detail below, relate to allegations that certain witnesses lacked impartiality and independence. The Court of Appeal's judgment in *Prattley Entreprises v Vero* is the leading case on this issue.<sup>9</sup> Miller J for the Court set out the criteria for the admissibility of expert opinion evidence in paragraphs [93] to [102]. These points are summarised and distilled by John Katz QC in *Expert Evidence in Civil proceedings*.<sup>10</sup> Mr Katz QC's points relevant to this matter are:

(a) Substantial help [to the decision maker] in terms of s25(1) of the Evidence Act 2006 is an amalgam of relevance, reliability and probative value.

(b) Whether the proposed evidence satisfies the criteria of relevance, reliability and probative value is for determination by the trial judge.

(c) The judge is not bound to accept the evidence of an expert, even where uncontradicted.

...

(i) Pursuant to [section 25 and 26 of the Evidence Act 2006] evidence may be excluded if it lacks reliability, impartiality or fails to comply with the requirements of the Code of Conduct. Impartiality is the touchstone of the Code of Conduct.

...

(l) Impartiality is not the same as independence. An expert called by a party need not be independent of that party. Lack of independence or conflict of interest generally goes to weight, not admissibility. An expert who is not independent may still be impartial.

(m) Lack of impartiality is a behavioural quality showing a lack of neutrality on the part of the expert.

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<sup>8</sup> See Evidence Act 2006, s25.

<sup>9</sup> *Prattley Entreprises Limited v Vero Insurance New Zealand Limited* [2016] NZCA 67.

<sup>10</sup> John Katz QC *Expert Evidence in Civil proceedings* (Thompson Reuters New Zealand, Wellington, 2018) at 8.3.



[40] In *BNZ Investments Ltd v CIR* McKenzie J stated:<sup>11</sup>

Impartiality is an obligation cast upon an expert witness, whose evidence is admissible, not a legal precondition to the admissibility of the evidence. The qualification to give expert evidence is expertise, not independence.

[41] The issue was also discussed in *Palmer v Hewitt*<sup>12</sup>, where Cooke J stated:

An expert may not be completely independent, but can give expert evidence if do so impartially. But there is a point where an expert witness's involvement in the subject matter of the litigation means that their evidence is not substantially helpful.

[42] As I commented in *P Trust v IAG*; the pool of qualified experts for matters in the CEIT jurisdiction is small. Care must be taken to not exclude what may be useful assistance for technical rather than substantive unfairness.<sup>13</sup> As this Tribunal is inquisitorial there a wider power to receive evidence than in matters governed by the rules of Court or the Evidence Act. Given the over-riding considerations of natural justice there is less scope for excluding evidence which is, or may be, relevant to an issue.

*Mr Pickering and Mr Whyte – lack of impartiality*

[43] An allegation made against both Mr Whyte and Mr Pickering is that they lack impartiality due to the building contract Mr and Mrs E have signed with Whyte Construction Limited. The contract contains the following added clause:

21.2: The builder acknowledges the owner's ability to proceed with the building work is subject to the approved funding from IAG to cover the earthquake repairs as outlined in the builder's estimated dated 8th June 2018, or any future updated value as a fixed price quotation.

(the funding clause)

[44] IAG's allegation is that the funding clause creates a contingency, or conditional fee, arrangement with Mr Pickering and Mr Whyte. It says that, as the architect and builder for the remediation they have a "*powerful financial interest*" for my decision to favour Mr and Mrs E. Therefore, IAG argues these witnesses lack impartiality and little or no weight should be given to their evidence.

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<sup>11</sup> *BNZ Investments v CIR* (2008) 19 PRNZ 71 at [22].

<sup>12</sup> *Barbara Palmer v Hewitt Building & Anor* [2021] NZHC 1460 at [46].

<sup>13</sup> *P Trust v IAG* [2020] CEIT 24.

[45] The definition of a “conditional fee arrangement” in this context is from High Court Rule 14.2, as modified by the High Court Code of Conduct for Expert Witnesses:

**conditional fee agreement** means an agreement under which a party to a proceeding and a person who provides [expert evidence] agree that the party to the proceeding is liable for payment of some or all of the person’s fees and expenses depending on the outcome of the proceeding.

[46] Mr Katz QC discusses the effect of a contingency fee arrangement on the admissibility and weighting to be given to an expert’s evidence. The issue with these fee arrangements is that an expert is incentivised to give evidence which is not impartial, as they will profit from a particular outcome. He concludes that to exclude evidence is a drastic remedy; unless the fee arrangements and circumstances are such that the evidence is rendered so unreliable as to become irrelevant, the issue must be treated as one of weight rather than admissibility.<sup>14</sup>

[47] Mr Whyte is a director and shareholder of Whyte Construction. As such should the works go ahead it could be argued that his company will profit from the work. However, the funding clause does not create a contingency fee type arrangement, as there is no direct connection between the outcome and Mr Whyte’s remuneration for acting as a witness.

[48] The funding clause is clearly intended to prevent Mr and Mrs E from being obliged to continue with the building contract should they be in a position where they cannot afford the costs involved. This is prudent. The clause is not structured in a way which creates any immediate personal reward for Mr Whyte. At most, Whyte Construction Limited’s rights under the contract are protected. Whyte Construction Limited is a separate legal entity to Mr Whyte, albeit one in which he has a personal interest as a shareholder.

[49] IAG places reliance on *Prattley v Vero* where an expert witness, Mr Keys, was the Principal of the entity which was funding the litigation.<sup>15</sup> At first instance Dunningham J placed “*little reliance if any*” on his evidence due to its lack of cogency.<sup>16</sup> On appeal Miller J for the Court found that Mr Key’s evidence could also have been rejected for a lack of impartiality.<sup>17</sup> As principal of the litigation funder Mr Keys stood to gain personally from the

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<sup>14</sup> John Katz QC “Expert Evidence in Civil proceedings”, above n 13, at 30.7.

<sup>15</sup> *Prattley Enterprises v Vero* [2016] NZCA 67.

<sup>16</sup> At [134].

<sup>17</sup> At [103].

success of the litigation. His retainer was, in effect, a conditional fee arrangement. Mr Keys also acted as an advocate for Prattley, and under cross-examination admitted that he was contractually obliged to put Prattley's interest first, an obligation in direct conflict with the role of an impartial witness.

[50] Mr Whyte's position differs from that of Mr Keys.

- (a) There is no direct financial reward for Mr Whyte, at best Whyte Construction Limited's contract with Mr and Mrs E continues, whereas Mr Keys' company would receive a share in any damages awarded.
- (b) The Whyte Construction contract contains a builder's margin, however, whether the contract delivers a profit was not explored in cross-examination and there is no evidence before me about this. At most there is a possibility of profit. This situation is akin to that of Mr Ticehurst, the witness in *Palmer* who was retained by Mrs Palmer to rectify the defective building works. Cooke J was Counsel in *Prattley* at first instance and in appeals to the Court of Appeal and Supreme Court. I consider his approach on this issue to be highly persuasive.
- (c) Mr Keys had compromised loyalties due to his acting as an advocate and as a witness. The two roles are irreconcilable. Mr Whyte has no such compromises. I note that Mr Keys was cross-examined on this point, whereas Mr Whyte's alleged lack of independence was not put to him.
- (d) From my reading of the *Prattley* decision, Mr Keys' evidence lacked cogency to such a degree that it was of no use to the Court.
- (e) As noted by Mr Katz and Cooke J, impartiality is a behavioural quality. On the witness stand Mr Whyte demonstrated impartiality. He has been used as an independent expert advisor by this Tribunal, and, as discussed below I found his evidence was relevant, reliable and had probative value for a number of the issues before me.

[51] Mr Pickering is the employee of Noel Strez Architects Ltd, an architectural practice. There is no evidence to suggest that beyond his salary, he will make any personal financial gain from the remediation going ahead, although the practice he works for may do. I note that he is neither a shareholder nor a Director of Noel Strez Architects Ltd. Mr Pickering displayed impartiality in giving his evidence.

*Mr Wilson and Ms van Eeden*

[52] After QBE withdrew, Mr Johnstone made an application to have evidence from Mr Wilson and Ms van Eeden excluded, as it would not be timely or cost effective for them to remain as witnesses, there were also concerns that if they remained as witnesses it would be prejudicial towards the applicants' case. I considered this issue and made an oral ruling on the first day of the hearing. I found that, as they were providing evidence in a "hot tub" situation, there would be little effect on the time taken for the evidence to be heard. In terms of the cost, any additional cost would fall to IAG. With regard to prejudice, having looked at the briefs of evidence, there was balance to the evidence of Mr Wilson and Mr van Eeden which suggested that their views were as likely to assist Mr and Mrs Es' case, as that of IAG.

*The stucco producer statement*

[53] Mr Johnstone sought to have a producer statement which had not been part of the agreed bundle to be excluded. I made an oral ruling that it was likely that this document had been provided to Mr and Mrs E but had somehow gone missing from their records. Moreover, it was directly relevant to the issues before me. Therefore, the producer statement was entered into evidence.

*Mr Tracy*

[54] Mr Johnston sought to have Mr Tracy's evidence excluded, as he had not been part of the expert's conferral, and that his crack map provided opinion on the cause of the cracks to the stucco. I ruled that Mr Tracy's evidence was relevant and that any issues with his opinions on the cause of the damage could be dealt with through the weighting given to his evidence. I have concluded that his comments on causation are of little weight, as in oral evidence he advised that he was not retained to consider causation. He also clarified his comment, that all the cracks he identified were pre-existing, as being a reference to his opinion that they

occurred due to the lack of control joints. This last position is flawed. While control joints may have meant less cracking, the forces on the building during the Port Hills earthquake were such that the stucco would have suffered damage even with control joints. This is shown by areas such as besides the kitchen and bedroom one windows, where significant pieces of stucco broke away. No control joint would stop such damage from occurring.

*Mr Pickering – area of expertise*

[55] Mr Cuff made criticisms of Mr Pickering's evidence as, in his affidavit he had given evidence of the issues beyond his expertise and had not been provided with Mr Tolley's second report. This criticism relates to his comments regarding risk, building contract issues, water ingress issues, and the application of the Building Act.

[56] I do not believe these criticisms are fairly made. The role of an Architect in this sort of complicated repair is to provide oversight and design work. They often act as project manager, coordinating other trades and professions. This requires knowledge of and involvement in a number of construction issues. If his evidence was in any way in conflict with, for instance, one of the engineers about an issue of structure, the engineer will be given more weight, but that does not mean Mr Pickering cannot provide qualified opinion of use to this Tribunal.

[57] I have found that Mr Pickering's statements about risk were no more than a prudent architect with experience of leaky home remediations would make. I accept that they have less relevance to the contractual dispute between the parties than they would have if this were a claim against a negligent builder or repairer.

[58] With regard to Mr Pickering's comments regarding the Building Act and building contracts, specifically the Falcon contract, all of the experts who have operated in a commercial setting will have views that are relevant to contract and Building Act issues. The interpretation of the building contract is an issue for lawyers, and ultimately for the Tribunal. However, the context in which that interpretation occurs involves industry practice about which experts have relevant experience.

### *Mr and Mrs E 's evidence*

[59] There were issues which arose during the hearing with Mr and Mrs E's recollections of events and their keeping of records. For instance, the EQC claim for the Valentine's day earthquake involved relatively extensive plaster and paint repairs to internal linings. However, the details of this claim and the documents relating to it, were not disclosed to IAG or the experts. This had a significant bearing on the claim that internal lining repairs were defective. Mr and Mrs E explained this and other issues as lapses of memory. While Mr Cuff did not invite me to make any inferences regarding Mr and Mrs E's credibility, these lapses present a question about the reliability of their evidence.

[60] I found that Mr and Mrs E 's responses were honest. When they could not recall detail, they were quick to admit it. Mrs E was the person principally involved in the repairs, and she has suffered from several significant health issues through the periods in question. When searches turned up documents, such as the 2016 EQC payment letter, the documents were disclosed. There were similar issues around Mr Tolley's second report which contained the results of the laboratory testing, and around the stucco producer statement.

[61] I note that CEIT litigation is often complex and document heavy. A decade has passed since the CES earthquakes and in such time, documents may be lost or found, and events considered and re-considered, often with added significance in light of years of dispute and litigation. Applicants in this Tribunal are homeowners, they are generally not professional litigators. They lack the record keeping systems and file management of insurers or other commercial entities. They will not be held to the same standards of record keeping. I do not find that any of the issues raised regarding Mr and Mrs E's evidence affected the weight it should be given.

## **THE LEGAL FRAMEWORK**

[62] In this case there are a number of legal and factual issues to be considered. The claim is that there are: areas with un-scoped earthquake damage, areas where earthquake damage was correctly scoped but repairs were done poorly or not at all, areas where there is damage consequential on the defective repairs, areas where there is a damage consequential on pre-earthquake building defects, and areas where there is a mix of these issues. The appropriate legal response to these issues is driven by the relationship between the parties and the cause

of the damage or defective repair in question. For earthquake damage the policy governs the response. For defective repairs the response is driven by the adequacy of the repairs with regard to the policy standard and also the legislation, codes and practices governing building standards.

### *Sleight v Beckia*

[63] I am guided by *Sleight v Beckia Holdings* in which Gendall J considered a number of the issues faced in the current case.<sup>18</sup> In that case IAG, and QBE were defendants, the relevant policy wording was the same as that before me, and both homes were repaired under the Programme. I am bound by Gendall J's rulings on the policy and its interpretation. There are some factual differences and the respective build contracts have key differences which alter the remedies available. Much of the analysis relates to liabilities between IAG, the builders, Hawkins and, Hawkins' insurer; QBE. In this case IAG settled with QBE before the hearing and IAG are the only respondent standing so my discussions focus on IAG's liabilities. However, Gendall J made findings about the governance of the Programme which provide relevant context to my analysis.

### *Sleight – policy interpretation*

[64] In *Sleight*, Gendall J considered the authorities and the proper interpretation of the policy wording and found that:<sup>19</sup>

Taking into account all the matters I have outlined above, I reach the view that the Sleights' Policy here is clearly a "to pay" policy rather than a "reinstatement policy". It is one in which, in the words of the Policy, the election to repair or reinstate rests with the Sleights, and IAG's policy obligation is simply to meet the cost of those repairs to the policy standard.

[65] His finding turned on the fact that the policy gives the insured party the right to elect what form the indemnity should take; reinstatement to as 'as when new' basis, or cash settlement for the indemnity value of the undamaged property. This means that IAG's obligation under the policy is one of payment only, there is no obligation to re-instate for an insured, or to offer any assistance.

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<sup>18</sup> *Sleight v Beckia Holdings & Ors*, above n 1.

<sup>19</sup> At [153].

[66] He found that neither the building contract, nor payments made to the builder for defective works, modified IAG's policy obligation, which was no more and no less than to reinstate the damaged property to a repaired condition.<sup>20</sup> My reading of this, in conjunction with the authorities on the meaning of 'as when new' is that once the insured has elected to reinstate, IAG is obliged to pay the reasonable costs to restore damaged property to a condition which renders the fact of earthquake damage immaterial to its future function, and value.<sup>21</sup> The policy pays to reinstate to an 'as when new' condition, rather than simply to indemnify, so issues of betterment are irrelevant. The nature of the repair work required to meet the policy standard must include:

- (a) restoration of functionality requiring considerations of whether a damaged element has a structural, functional, aesthetic or mixed purpose;<sup>22</sup>
- (b) aesthetic equivalence to a similar standard as when it the damaged element was new;<sup>23</sup>
- (c) meeting health and safety requirements for the useful life of the damaged element, for example; structural components must last for at least 50 years and cladding for at least 15 years;
- (d) consideration of the future saleability of the damaged property, which by implication requires that the reinstatement must enable the insured to meet standard real estate warranties for quality and compliance;<sup>24</sup> and
- (e) restoring the damaged portions of the property to compliance with either the building regulations at the time it was built, or if required by the extent of the work or the nature of the building element being repaired, to current standard (discussed below).

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<sup>20</sup> At [179] - [180].

<sup>21</sup> *Parkin v Vero Insurance New Zealand Limited* [2015] NZHC 1675 at [117].

<sup>22</sup> At [120].

<sup>23</sup> *Sleight v Beckia Holdings & Ors*, above n 1, at [164].

<sup>24</sup> *Parkin v Vero Insurance New Zealand Limited*, above n 28, at [144]; and <sup>24</sup> *Sleight v Beckia Holdings & Ors*, above n 1, at [165]-[168].



*Sleight - Consumer Guarantees Act*

[67] Gendall J found that IAG and Hawkins were liable under s 28 Consumer Guarantees Act 1993, for failures to exercise reasonable care in the provision of services to the Sleights as consumers. The services were: “*arranging for the reinstatement work to repair the earthquake damage to be carried out on the property through the Managed Repair Programme*”.<sup>25</sup> The limitation clause did not apply as you cannot contract out of the CGA. He found:

Addressing s 28 of the CGA, IAG is deemed to have guaranteed to the Sleights that the services it agreed to undertake would be “carried out with reasonable care and skill”. The standard applying to that guarantee is that of an ordinary supplier relating to the nature of the service supplied. IAG is an insurer. It is not a builder or building contractor involved in the construction industry. But, as an insurer, it is often involved in repair and rebuild work pursuant to insurance claims under its policies. And, as an insurer, it also has those obligations of good faith to its policyholders that I have outlined at [115] above.<sup>26</sup>

[68] Gendall J examined the conduct of IAG in exercising its duties. He found that problems arose as there was a fundamental mismatch between Hawkins’ and IAG’s expectation of Hawkins’ role in project managing building works under the repair programme. In short IAG did not resource Hawkins to conduct an adequate level of oversight over the builders in the programme. When combined with the pressures on builders at the time, and the general shortage of qualified staff this meant that no-one was checking that work was of a sufficient quality or was compliant. This was also apparent in the present case where Mr and Mrs E, and Mr Groufsky all referred to the high level of staff turn-over amongst the Hawkins project managers. In correspondence between Falcon, Hawkins and IAG the problems with difficulties managing and scheduling trades were apparent. Gendall J concluded:<sup>27</sup>

As I see it, despite IAG’s claims to the contrary over the 2012 RSMA arrangements<sup>28</sup>, and its assurances to policyholders that Hawkins would carry out a project management quality checking role for them, IAG simply chose itself to take the real risk that overworked builders like Farrells might err in meeting their quality and good workmanship obligations under the standard building contracts it had prepared.

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<sup>25</sup> *Sleight v Beckia Holdings & Ors*, above n 1, at [254].

<sup>26</sup> At [260].

<sup>27</sup> At [259](c)(Viii).

<sup>28</sup> The service contract between IAG and Hawkins

[69] As a result of the failures in the provision of the services, it was found that IAG were liable for the work to remedy the defective repairs. The circumstances of this claim with that of the Mr and Mrs Sleight with regard to the management of the Programme are identical. I adopt Gendall J's findings.

### *Sleight - Negligence and estoppel*

[70] Gendall J found that IAG had assumed out-of-policy obligations when it arranged repairs through the managed repair programme. These duties were established as IAG represented to the Sleights that it, along with Hawkins, would control and oversee the repairs. Hawkins was IAG's agent and the project manager for the repairs. Hawkins ability to act as Project Manager was compromised by IAG's decision to reduce the project management resources available. Hawkins and IAG further exercised a high degree of control and oversight through the building contract. His Honour found:<sup>29</sup>

In my view, the Sleights were closely and proximately affected by IAG's conduct under its Managed Repair Programme in arranging what was significantly defective repair work to their home. Further, it was clearly foreseeable that the Sleights would suffer loss if the reinstatement work was carried out negligently, which is the case here. IAG, in owing a duty to exercise reasonable care and skill in relation to the repair work being arranged and managed under its Managed Repair Programme, breached that duty.

[71] However, in *Sleight* the building contract contained a clause which prevented the Sleights from bringing claims in negligence against IAG. This clause also barred the estoppel claim. In the current claim, the Building Contract contains no such clause. While many aspects of IAG's tortious duties are subsumed by the more demanding standards of the policy, a finding in negligence has different remedies which require different considerations to remedies under the policy. This is discussed below.

### *Policy exclusions*

[72] The policy contains exclusion clauses which limit or negate IAG's liability for certain types of damage:

#### **Exclusions that apply to the whole Policy**

...

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<sup>29</sup> *Sleight v Beckia Holdings & Ors*, above n 1, at [316].

### **Faults and defects**

**You're** not covered for the cost of fixing faulty design or faulty construction.

...

### **Gradual damage**

**You're** not covered for:

1. wear and tear, depreciation, corrosion, rust, or
2. rot, mildew or gradual deterioration, except for **loss** covered under 'Hidden gradual damage' on page 8.

[73] Exclusions should be read narrowly, and the law is that if there are two concurrent causes of damage one of which is excluded and the other is not, the exclusion has effect.<sup>30</sup> This does not require the insurer to prove that the excluded cause is proximate or dominant, merely effective, or a material contributing factor.<sup>31</sup> However, the policy pays to reinstate covered damage to an 'as when new' standard, with no reference to its pre-damage age or condition. The policy also pays to bring damaged property to the standard required by current building legislation if necessary. When considering the application of an exclusion the materiality of the excluded cause is key. There may be property which suffered a degree of damage from an excluded cause, say wear and tear, however if that property suffers from damage from a covered cause, say fire, the fact of the fire damage makes the wear and tear irrelevant. As discussed at [95] and [96] below, the question is what damage makes the remediation necessary?

### *The Building Act and Code, and compliance*

[74] In *Sleight* the repair works were subject to an approved consent application, but the works were incomplete and were not signed off by Christchurch City Council. In the present case, there was no consent application. The question of whether a building consent (or a formal exemption) should have been sought is before me; Mr and Mrs E argued that it was necessary, IAG argues that the work is of a type which does not require a fresh consent, as it complies with the consent under which the house was built.

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<sup>30</sup> *Sleight v Beckia Holdings & Ors*, above n 1, at [206](a); *Wayne Tank & Pump Co Ltd v The Employers' Liability Assurance Corporation Ltd* [1974] QB 57, as applied in *AMI Insurance v Legg* [2017] NZCA 321. See also *Colvinaux's Law of insurance in New Zealand* (2ed), R Merkin QC and C Nicolls (Thomson Reuters, Wellington 2017, at 1103.

<sup>31</sup> *Body Corporate 326421 v Auckland Council* [2015] NZHC 862.

[75] Whether or not repairs require a new building consent is a common source of dispute in the CEIT jurisdiction. This is because there are no clear indicators in the legislation to show when repair work is substantial enough to trigger the need for a new consent. If a new consent is required it necessitates bringing the repaired element up to current code, which almost invariably costs more. The mechanisms of the Building Act 2004 (BA) and Building Code (the Code) rely heavily on the licenced building practitioner completing the building or design work to make a judgment call on whether a new consent application should be made. As is the case here, it is common for claimants' experts to state that work requires a fresh consent and insurers' experts to state that the work is not substantial enough to require a fresh consent.

[76] This issue turns on ss 17, 42A, of the BA. Section 17 requires all new building work (including repair work) to comply with the Code, whether the work is repairing an existing structure or building a new one. This is subject to exceptions contained in the BA and any waiver or modification granted by the consenting territorial authority. These exemptions are necessary so that older building elements can be maintained without the need to be brought up to current BC requirements.<sup>32</sup> Section 42A allows for work listed in Sch 1 of the BA to be exempt from s 17. However, once the repairs or alterations are done the whole building must comply with the Code to the extent specified by s 42A (2):

(2) Subsection (1) is subject to the following conditions:

(a) the building work complies with the building code to the extent required by this Act:

(b) after the building work is completed, the building,—

(i) if it complied with the building code immediately before the building work began, continues to comply with the building code; or

(ii) if it did not comply with the building code immediately before the building work began, continues to comply at least to the same extent as it did then comply

[77] Clause 1 of Sch 1 exempts certain work from the requirements of s 17:

General repair, maintenance, and replacement

(1) The repair and maintenance of any component or assembly incorporated in or associated with a building, provided that comparable materials are used.

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<sup>32</sup> An example would be the re-glazing of a sash window in a Victorian Villa, without the exemptions, a broken window would trigger the need to replace the whole window unit with double glazing.

(2) Replacement of any component or assembly incorporated in or associated with a building, provided that—

(a) a comparable component or assembly is used; and

(b) the replacement is in the same position.

(3) However, subclauses (1) and (2) do not include the following work:

(c) repair or replacement (other than maintenance) of any component or assembly which has failed to satisfy the provisions of the building code for durability, for example, through a failure to comply with the external moisture requirements of the building code...

(Clause 1)

[78] The exemptions in Clause 1 cannot be applied when a building element has failed to meet durability requirements or when the work involves the substantial replacement of any component or assembly contributing to the building's structural behaviour or fire-safety properties. The exemptions are subject to interpretation. This is shown by the fact that MBIE's guidance document on Clause 1 runs to more than 200 pages. Christchurch City Council has issued its own criteria for exempt work, which I have found useful and discuss with relation to the specific building elements below.

[79] It is important to differentiate between repair of an element of a building and replacement of an element. MBIE Determination 2015/060, considered compliance where external stairs, compliant when originally built, required replacement after being damaged in the Canterbury Earthquake Sequence (CES) events.<sup>33</sup> The replacement stairs were in re-built the same position, using the same materials and using the original riser and tread dimensions. These dimensions did not comply with the code at the time of reinstatement, which required lower riser heights. The determination considered that as the stairs themselves were wholly replaced they were new work which needed to be compliant with the current code. This can be compared with situations when an element is repaired rather than being wholly replaced.<sup>34</sup> When an element is being repaired within the exemptions in cl 1(1), it falls within the existing consent. When an element is being replaced it may fall within cl 1(2) but as the determination shows it may still trigger the need for a new consent.

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<sup>33</sup> MBIE Determination 2015/060, 28 September 2015.

<sup>34</sup> See *Fitzgerald v IAG New Zealand Ltd* [2018] NZHC 3447.

[80] A significant issue has been the lack of documentation of the repairs. There is no requirement in the BA or Code for documents to be produced when Clause 1 exemptions are in force. However, there are industry practices relating to documenting work, and these are discussed below with reference to each component. Another aspect of this issue is that the BA implies warranties that work will be carried out properly, competently and in keeping with consent requirements, whether new or existing.<sup>35</sup> The contractor warrants that they are qualified, have relied on professional skill and judgment to achieve compliance, and that the materials used are suitable and are installed according to industry and manufacturer's requirements. The warranties last for 10 years from the date of the breach.<sup>36</sup> Should work be in breach of these warranties, as has occurred in some instances here, a lack of documents showing who did the work and when is highly problematic.

[81] The discussions between the various experts, all experienced participants in the construction industry, showed that the industry relies upon trust. The engineers described that for some trusted contractors they would accept photos of works rather than an inspection whereas for others, Falcon included, they would insist on an actual inspection, as there was not a relationship of trust.

[82] Three further important considerations are that:

- (a) The Code is a performance-based document. As Mr Davison pointed out a house could be built out of chocolate if you could stop it from melting in the sun. In short, any method can be used if the consenting authority is satisfied that the method can meet the performance requirements of the code.
- (b) The Code sets minimum standards of performance not a ceiling. It may well be that a designer may specify a solution which exceeds the Code's standards. An example is masonry brickwork, the Code requires cladding to have a 15-year life, however, properly built masonry veneers can last centuries.
- (c) The Code is not the final word on insurance issues. Once the performance requirements of the Code are met, it is the insurance policy which governs the

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<sup>35</sup> Building Act 2004, s 397.

<sup>36</sup> At s 393.

outcome. As an example, if a historic triple brick house is destroyed in an earthquake, the building code allows it to be replaced with a compliant tilt slab dwelling, but an ‘as when new’ policy does not.

### APPROACH TO ISSUES OF PROOF

[83] The issues before me require decisions to be made about the pre-earthquake condition of the house, the extent of earthquake damage, the adequacy of the scope of repairs, whether the repairs were defective, whether the defective repairs have caused resulting damage, and what liability, if any, IAG has for remediation.

[84] When considering these issues, I am mindful of the scarcity of evidence referred to above, and the problems homeowners can face in proving their claims. I note Member Cogswell’s approach in *A G v Earthquake Commission & Vero*:<sup>37</sup>

The Tribunal must apply common sense to this determination, as it is accepted that it may not be possible to determine causation with absolute certainty. The Tribunal may draw “robust inferences of causation”, but must do so only where there is sufficient supporting material to prove causation.

[85] The burden of proof is the description given to the need for a party to prove a fact or circumstance to further its arguments. In an insurance claim the burden of proof lies on the insured person to put forward facts to support their claim. If the insurer wishes to deny the claim as the facts of the claim are excluded from cover, the burden shifts to the insurer to prove an exclusion applies. However, Mr and Mrs E s’ argument is that the steps taken to repair damage were inadequate or defective. There is no question that the underlying claim was valid. The application also involves alleged building defects which can only be conclusively proven by widespread destructive testing. The remediation of damage caused by such testing could easily subsume the work required to remediate the defective repairs.

[86] My reading of ss 40 and 56 of the Canterbury Earthquake Insurance Tribunal Act 2019, in light of the approach taken by the High Court when considering the similar s 72(1)(a) of the Weathertight Home Resolution Services Act 2006 is that I am able to consider all material before me in an inquisitorial manner. I am not bound by pleadings.<sup>38</sup>

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<sup>37</sup> *A G v Earthquake Commission & Vero Insurance New Zealand Limited* (2021) CEIT 0056-2019, at [40]; and *ACC v Ambros* [2007] NZCA 304 at [32] and [67].

<sup>38</sup> See *Safforti v Jim Stephenson Architect Ltd* [2012] NZHC 2519 at [40]-[45].

[87] *Sleight* establishes that the duty to pay for repair continues until the fact of earthquake damage is immaterial to the property's future function, and value. Here, there is a sparse record of the repairs, and there are considerable difficulties in proving building defects. The sparse record has come about in large part due to the flaws in the oversight of the managed repair programme as discussed in *Sleight*.

[88] In *LS v Medical Insurance Society*, I recognised that insurers have a duty to accurately assess claims, and communicate the details to the insured, so the insured can make the choices the policy requires of them in any informed manner.<sup>39</sup> In this case damage, largely to stucco and structural elements, was not accurately assessed. The poor initial assessment led to the budgeted repair cost increasing substantially. The poor assessment contributed to the inadequate repairs and, combined with the lack of records of the works, complicates, my assessment of the extent of earthquake damage more than ten years after the event.

[89] In a normal residential build contract, the homeowner has a high degree of control. They make all the important choices, including managing their level of risk through decisions about the contract terms, the builder, project managers, engineers, architects, or sub-contractors to be used, and over decisions such as whether to seek consents. As the homeowner also holds the purse-strings they have another layer of control. In the original build process Mrs E and the builder managed the build and exercised this control, producing a high-quality outcome. Under the Programme, Mr and Mrs E had little control over the repair process. Any control they did have was filtered through a chain comprised of the IAG claims handler, the IAG Loss Adjuster, the Hawkins Project Manager, then to the builder.

[90] Mr and Mrs E did not create the situation they are now in; choices under the Programme which were made by others have led to the current circumstances. IAG designed and controlled the programme, with the inadequacies of project management found in *Sleight*. IAG inadequately assessed the damage to the home. As I discuss below, these inadequacies led to a lack of oversight, which in turn led to poor decisions about repair methodologies, compliance, poor workmanship, and substandard record keeping.

[91] In the normal course of events Mr and Mrs E are required to prove their claim, a requirement made very difficult due to the poor initial assessment and the lack of records of

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<sup>39</sup> *LS v Medical Insurance Society* CEIT 0024-2020 at [34].



the repairs.<sup>40</sup> The party that benefits from this lack of records is IAG, whose decisions ultimately led to the situation. In these circumstances it would not be reasonable or just to require an exacting level of proof from Mr and Mrs E. Their situation differs from that in *Jarden v Lumley*.<sup>41</sup> In that case there was a lack of evidence put forward by the insured to show what earthquake damage had occurred, here the issue is what repairs were done and were they adequate. I approach the evidence on the basis that Mr and Mrs E need to establish a prima facie case that the damage they allege is either due to defective repairs or is unaddressed or under-scoped earthquake damage. Once they have done so, the onus shifts to IAG to establish that the damage resulted from a cause other than earthquake damage or defective repairs. If damage is established, the onus is on Mr and Mrs E to prove on the balance of probabilities that the remedial strategy they propose is required for IAG to discharge its obligations under the policy.

[92] This case differs from *Bligh v Earthquake Commission & IAG* and *He v Earthquake Commission & Ors*.<sup>42</sup> In those cases, the buildings were older: in *Bligh* the house was built in the 1860s, and in *He* the shop and home were built in the 1930s. In those cases, defects were related to the age of the buildings and lack of maintenance. The deterioration was open to be seen and was so extensive that it presented an evidentiary challenge, in that it was impossible to show that earthquake damage had occurred. The condition and age of the buildings was such that the earthquake damage was insignificant when set against the pre-existing issues.

[93] In *Sadat v Tower* the house was a relatively new house but had pre-earthquake static settlement.<sup>43</sup> The homeowners could not show that the earthquake had made a more than *de minimis* contribution to the condition of the house. In other words, the damage in need of repair was caused by an uninsured event.

[94] The ‘as when new’ policy standard provides important context when drawing the line about whether damage is covered or is *de minimis*. The ‘as when new’ requirement means that the policy remediates with no reference to the age or condition of the damaged property.

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<sup>40</sup> For example; it is unknown what in area stucco was repaired and how, as discussed below at [156] and [157].

<sup>41</sup> *Jarden v Lumley General Insurance (NZ) Ltd* [2015] NZHC 1427.

<sup>42</sup> *Bligh v Earthquake Commission & IAG* [2018] NZHC 2102; and *He v v Earthquake Commission & Ors* [2017] NZHC 2136.

<sup>43</sup> *Sadat v Tower* [2017] NZHC 1550.

This means that wear and tear, or poor condition is irrelevant, unless the damage claimed is for the wear and tear or poor condition.

[95] In the present case the house was 10 years old when damaged and was in relatively good condition. The earthquake damage was significant, and the necessary repairs were extensive. Against this background it must be proven that any latent water damage from weathertightness defects was such that it is that water damage which needs to be addressed rather than earthquake damage or defective repairs. In *He*, the Court of Appeal specifically addressed this issue:

Pre-existing damage and deterioration are not barriers to a claim for earthquake damage. But where there is already extensive damage, or where a building is already in a dilapidated state, minor additional physical effects caused by an earthquake may make no material difference to the value or usefulness of the house, with the result that there is no damage to which the Act or the insurance policies would respond.<sup>44</sup>

[96] The inquiry for each area or element which is damaged and requires remediation, is whether considering all the available evidence, the remediation is necessary due to earthquake damage, defective repairs, or pre-existing building defects. If an element needs remediation as it was un-repaired or poorly repaired and has not withstood weather as a result, that remediation is necessitated by the defective repair.

### **THE PRE-EARTHQUAKE CONDITION OF THE HOUSE**

[97] The issues of what damage the house sustained during the earthquakes, and the extent of the defective repairs is complicated by the pre-earthquake condition of the house. Before I can consider the issues for each element, I need to consider the pre-earthquake condition of that element.

#### **Changes from the consented plans**

[98] As stated above the house was architecturally designed and was finished to a high level. During the construction process there were some changes from the original plan which have a bearing on the issues before me. The relevant changes were:

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<sup>44</sup> *He v EQC & Ors* [2019] NZCA 373 at [8].

- (a) Plaster cladding on the original specifications was “*40mm HD polystyrene to timber framing*”. On an amended plan with approval dated 9 March 1998 this was changed to “*3 coat plaster system on 12mm ply and building paper*” (the Stucco). Mr and Mrs E ’s evidence was that this change was made as the Stucco on ply was considered a more robust and weathertight cladding than the polystyrene substrate.
- (b) The shelf angle behind the brickwork on the double height section of the central block was originally specified as “*m4 steel angle to brickwork*” An undated amended sheet stamped by the CCC shows this changed to “*125 x 75 galv*”.
- (c) The flat roofed areas over the galleries were originally specified with Chevaline Dextx, a fibreglass reinforced, liquid applied, membrane. However, butynol membrane was substituted. This change was not documented.
- (d) The entrance archway at the front door was originally to be clad with plastered 40mm polystyrene. However, this was changed to brick cladding. This change was not documented.

### **Change to plaster cladding**

[99] During the initial construction there was a change from plaster over polystyrene panels to the cement-based stucco over ply. While the water resistance of the stucco is a significant issue discussed below, this change had an effect on the structure of the house. The polystyrene panel system is categorised as light weight cladding, and Mr Simcock pointed out that the structural calculations for bracing were based on this. The stucco cladding is medium weight. Viewing the plans, the change was made on 9 March 1998, whereas Mr Smith’s structural design work is dated December 1997.

[100] The change from lightweight to medium weight has ramifications for:

- (a) the bracing of the building, which is important to its ability to withstand seismic forces, although the fact that around that over half of the cladding is heavy weight brick means this should not be overstated;

- (b) the replacement of the linings (Gib board linings form part of the bracing system); and
- (c) for the possible remedies for the stucco issues, as over-rendering will increase the weight of the stucco further.

[101] Mr Harris agreed this was a relevant issue. These points are discussed further below.

### **Shelf angle**

[102] It is alleged by IAG that the shelf angle on the double height sections of brickwork on the central block were not installed during original construction. This is because there are no council inspection records of the shelf angle and in current practice weep holes are put in place as the shelf angle stops moisture from draining down the cavity between the brick veneer and framing.

[103] Mr Whyte, who was in the trade when the house was built, gave evidence that at the time the house was built; shelf angles were often installed with spacers, to allow a drainage gap, or without weep holes, as the porous nature of the brick work allows any moisture in the cavity to be soaked up by the bricks and dissipated. He also was of the view that there was a specific plan amendment involving the shelf angle and, therefore, the building inspector would have been looking for its presence. Mr Creighton, who was also in trade at the time the house was built, could not say for sure whether the shelf angle was there or not. Mr Wilson and Mr Davison agreed it was specified but could not confirm whether it was originally installed. Mr Tolley said that if it was in the plans it should have been in place. Mr Simcock and Mr Harris, as engineers both would have looked to inspect the shelf angle before the signing off on completion as it was a specifically engineered building element.

[104] A shelf angle was specified, and it was subject to an approved amendment. A builder constructing a high-end architecturally designed house, when faced with a specific structural requirement, which he will be paid to complete, with an owner who is closely involved, is unlikely to take it upon himself to omit that requirement. I also note that, a letter to Royal Associates Architects dated 30 January 1998 from CCC requests “[d]*etails of steel angle for proposed brickwork*”. I also note that Mr Smith was retained to provide inspections of the structural elements, and on 11 March 1999 certified that the structural work as designed had

been completed. I find that, on the balance of probabilities, the shelf angle was present when the house was originally built.

### **Was the house watertight pre-earthquakes?**

[105] IAG alleges that the house was not watertight before the CES events. It says that the work proposed by Mr and Mrs E is largely intended to address these pre-existing issues. In argument I was referred to the initial IAG assessment form, on which a checkbox for “*pre-existing/hidden/gradual damage*” was ticked. It was alleged that this showed that there was pre-existing damage to the house. However, this section of the form is headed “**General Information Discussed...Policy Exclusions**”, and also contains a ticked checkbox for “*Old Electrical Wiring*”, which cannot be relevant to a house which was only a decade old when the earthquakes struck. This form indicates merely that the assessor discussed policy exclusions with Mr and Mrs E in a general manner. It is not evidence of building defects.

[106] In his opening Mr Cuff argued that the house had been leaking from the day it was constructed. This mis-states the issue. All buildings leak. As discussed recently in *Cridge v Studorp* the issue is the rate of wetting; if water penetrates cladding and more enters than drains away or evaporates, moisture accumulates and over time causes damage.<sup>45</sup> Water will penetrate claddings, to deal with this building designers implement deflection elements at junctions, flashings which are intended to divert water away from other elements. For moisture that does enter cladding, cavities, drainage, and ground clearances are designed to allow drying.

[107] The house is complex, with multiple wings, a variety of faces and numerous complex elements. Some walls are stucco, some are bricked and capped with colour steel, some are bricked and capped with stucco parapets, some are largely glazed with stucco parapets. While each element may itself be sound, the junctions between elements are areas of risk for water ingress. In the case of the stucco clad elements water ingress is problematic. The stucco cladding is “face fixed”, that is the ply substrate is directly attached to timber framing. This means that unlike modern stucco systems or the brick clad elements of the house, there is no cavity behind the cladding to allow moisture to drain away. Any moisture entering the cladding is trapped in the framed cavity between waterproof building wrap and Gib linings.

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<sup>45</sup> See *Cridge v Studorp Limited* [2021] NZHC 2077, discussion at [22]-[23].

As the building heats and cools the moisture evaporates and condenses, moving around the relatively confined framed spaces, soaking timber and causing damage. In larger spaces, such as the trussed roof spaces under the tiled roof areas, a combination of the larger volume of air and the movement of air afforded by tiled roofs, increases ventilation, and these areas are less prone to damage. There is evidence that moisture accumulation has occurred in some stucco clad features and damage has resulted. The question before me is to what extent this risk has in fact eventuated in other areas.

[108] Masonry bricks are porous. During wet weather some moisture will soak into the brickwork. To deal with this properly installed brickwork features a 40mm+ cavity and weep holes, which allows for air circulation to dry the bricks, and allows water to drain away. This means that for those aspects and elements of the house which are mostly brick clad, or where stucco features sit above brickwork, any historical water ingress is less likely to be an issue.

[109] Most problems in similar houses occur at roof to wall junctions, and junctions between differing cladding types, where the water-tightness of the building relies upon the stucco itself, flashings behind corners, and other features to divert water away. However, as explained by Mr Pickering the flashings used were too small and, as explained by Mr Davison, stucco tends to crack as it is rigid and brittle, and buildings move.

[110] Mr Tolley took moisture readings inside the house using a non-invasive capacitance meter. These were not conclusive, apart from in the area of the kitchen/sunroom junction, which showed high moisture levels. He also conducted invasive moisture probe testing at site 1 below, at a gap between stucco and brick adjacent to the west galley, and another junction between stucco and guttering, at a location on the north aspect of the house, which I have not been able to identify. The moisture readings for each location were, in turn, 33.1%, 21.5% and 34.2% which are moderate to high readings, indicating moisture ingress.

[111] Mr Tolley conducted destructive testing, cutting through cladding or linings to access the framed cavity beyond to assess the extent of water ingress and damage. The test sites were:

- (a) site 1 at the stucco strip above the brickwork junction on the southside of the east gallery ('C' on figure 1);

- (b) site 2 at the junction between the kitchen and conservatory ('B' of figure 1);  
and
- (c) site 3 in the kitchen on the north east side of the double opening doors ('B' on figure 1).

[112] Samples of the timber at the test sites were taken and sent for testing by Dr Robin Wakeling, a Biodeterioration Consultant with extensive experience in the microbiological testing of timber in leaky building and earthquake cases. The sampling and Dr Wakeling's testing show heightened moisture levels in all samples. The analysis of the growth of moulds showed that sample four, from the base plate at site 3, had been exposed to moisture for more than 10 years.

[113] IAG provided copies of the relevant documents, including Dr Wakeling's report, to Dr Adrian Spiers, a former colleague of Dr Wakeling's with research experience in fungal and plant pathology and 16 years providing fungal spore analysis in leaky building cases. Both Dr Wakeling and Dr Spiers have appeared as experts in leaky building litigation in the High Court. Dr Spiers commented:

In conclusion, the numerous faults identified in the building envelope and the high moisture loadings in the timber framing are setting up this property for ongoing decay in future. Analysis of timber samples has shown that that since the earthquake the early stages of decay are underway. In the meanwhile high levels of preservative in the time will retard the establishment of decay.

[114] Mr Cuff was critical of the small number of samples taken and argued that further testing should have been carried out, asserting that IAG had offered to conduct that testing. I note that IAG's offer of further invasive testing was for the brickwork, not the stucco, and would have involved taking the double height brickwork down to half height. Mr Milsom advised that he would have taken one further sample, at a similar point to site 3, but on the wetter southern elevation. There are issues with destructive sampling in that, as shown with test site two, an area with risk of damage may be destructively tested but the damage has not eventuated. The process is hit and miss and may result in a need to repair damage caused by the sampling when there is no actual damage. With the large number of alleged defects on all faces and elements of the building, to conduct intrusive or destructive testing for all the at-

risk areas would result in the need to carry out substantial remediation, subsuming the repairs to the defects themselves.

[115] When the repairs were being carried out; linings were replaced in the master bedroom, kitchen, downstairs bathroom, both galleries, and other areas, an estimated 75% of the linings. On inspection of the progress payment forms this estimate seems reasonably accurate. In the kitchen area the insulation was replaced with heavier weight insulation. The downstairs bathroom was completely re-lined, as were the master bedroom, and en-suite. Mrs E was on-site two to three times a week and witnessed the house after linings were removed. She was questioned regarding whether she saw any signs of rot or blackening of timber members, but she did not recall seeing any.

[116] It is probable that had there been extensive frame rot, it would have been noted by Mr Danger and reported to IAG. In his evidence Mr Groufsky advised that “[h]ad Falcon noticed water ingress, they would have notified IAG of that, so that appropriate action could be taken (at the insured’s cost) for those pre-existing issues”. If there had been pre-earthquake moisture damage in the areas which were re-lined, it would have been noticeable, and likely to be reported.

[117] Mr Milsom identified 10 parapet to wall junctions, 10 apron wall junctions, and 9 parapet to pitched roof junctions. Test site 3 is the inside of the stucco clad column to the east of the double doors to the north side of the kitchen. It sits immediately below the junction between the kitchen and conservatory. This junction has no less than two apron wall junctions, two parapet to pitched roof junctions and a parapet to wall junction, and sits beneath an improperly fixed waterhead and a box gutter. In his report 28 July 2020, Mr Davison specifically noted this junction, commenting “[T]hese types of complicated junctions are difficult to make weathertight”. It is no surprise that this area has leaked. Test site 2, on the other hand, is only a few metres away, on the normally wetter south side of the kitchen/conservatory junction, and beneath an apron wall junction and parapet to pitched roof junction. This site had some sign of water damage to the stucco, but the substrate, insulation and framing were dry and while testing showed mould spores, there was no significant decay. Dr Wakeling could not conclude if the exposure to moisture was pre or post-earthquake.



[118] There are six areas identified where the sequencing of trades during the original build meant that guttering was installed before the stucco was completed. This meant that the ends of the guttering were embedded in layers of stucco. When guttering was replaced during repairs smaller profile gutters were re-installed leaving unfinished stucco exposed.

Examining the photographs, I place these as:

- (a) The north gutter to parapet junction between the conservatory and the kitchen, above test site 1, which shows rusted chicken wire, crumbling stucco, and deteriorated building paper, I also note the adjacent rain head was improperly fixed directly through the stucco;<sup>46</sup>
- (b) The gutter to parapet junction on the column at the northwest of the kitchen, which shows exposed unfinished stucco;<sup>47</sup>
- (c) The gutter to parapet junction on the northeast side of the master bedroom which shows exposed unfinished stucco;<sup>48</sup>
- (d) The gutter to parapet junction on the northwest side of the master bedroom which shows exposed, slightly rusted steel plaster reinforcing mesh, this mesh is different from the chicken wired used elsewhere;<sup>49</sup>
- (e) The gutter to parapet junction on the southwest side of the master bedroom which shows a thin strip of exposed stucco with exposed timber behind;<sup>50</sup> and
- (f) The gutter to parapet junction on the eastern side of the garage which shows exposed, slightly rusted, chicken wire and timber behind.<sup>51</sup>

[119] From the observations above I conclude that the area at (a) above clearly has pre-earthquake deterioration caused by the gutter end finishing and other defects. Area (b) had less pronounced, but nonetheless significant, pre-earthquake damage is more likely than not

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<sup>46</sup> 'A' on figure 1.

<sup>47</sup> 'D' on figure 1.

<sup>48</sup> 'I' on figure 1.

<sup>49</sup> 'J' on figure 1.

<sup>50</sup> 'K' on figure 1.

<sup>51</sup> 'L' on figure 1.

to have occurred, due to a number of defects. Areas (c), (e), (d) and (f) are defects, however pre-repair the ends of the guttering were embedded in the stucco, and would have acted as a weather seal, albeit imperfectly. After the repairs the guttering was of a smaller profile and has exposed these areas to the weather.

[120] There are other pre-earthquake defects noted including:

- (a) balustrade fixings directly through stucco on the balcony at the south end of the central block; and
- (b) cracks/gaps at junctions between stucco and roofing tiles; and between stucco and joinery.

[121] Ultimately, the building had high risk features. In some areas the risk had eventuated and there was water damage occurring before the earthquakes. Others had leaked but the rate of wetting meant there was no pre-earthquake damage. Others may fail if left unaddressed. However, the risk of failure, which was discussed by both parties is merely a single factor to be considered when looking at the earthquake damage and defective repairs. A feature may be defective and have suffered from water ingress, but the damage has not yet compromised its performance as a building component. If an insured event then causes damage which does compromise the building elements performance the remediation is required to address the insured cause, not the pre-existing defect.

[122] Looking at the various elements of the building, I conclude that:

- (a) Because the west block is almost entirely brick clad, or has stucco above brick work, any moisture entering either drained to the brick work and was dealt with by the cavity and weep holes, or would have had the opportunity to dry due to the combination of the brick cavity and the trussed spaces under the pitched roofs. Photos in evidence show that the top courses of bricks sit below openings in framing, allowing for ventilation and drainage. There are areas of stucco on the north and south gable faces of the bedrooms and the west facing wall adjacent.<sup>52</sup> These walls are at the end of an open trussed roof space. Had

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<sup>52</sup> 'E' and 'F' on figure 1.

this area sustained significant pre-earthquake water ingress the water would drain to an open ceiling area and would have been in an open roof space which allowed ventilation. Any water build-up would have caused a visible effect to the ceiling, as Gib ceilings are flat with no-where for water to drain to. The bathroom at the northwest of the block was relined, retiled and the bath (which sits against an external wall) re-fitted, during this work any water damage would have been visible. There are no indications that the west block was affected by pre-earthquake water damage.

- (b) The west gallery has a brick south wall and a glazed north wall, both with stucco parapets above. The roof of the gallery, which extends to the west block hallway and utility rooms, is flat with butynol over ply. There are high risk features in this area: parapet to wall junctions at the southwest, southeast, northwest and northeast junctions where the gallery transitions into the west and central blocks, and an apron wall junction at the southwest junction. However, the south wall of the gallery is clad in brick, and the junctions on the north side of the gallery sit adjacent to brick work. Any water ingress would drain to the brickwork and be dealt with by the cavity and weep holes. Any damage from water would have been noted during the reline. There are no indications that this area was affected by pre-earthquake water damage. There is more risk on the north side where the parapet sits above glazing. However, there is no evidence of pre-earthquake water damage in this area.
- (c) The central block is a mixture of brick and stucco clad. The upstairs has timber framing, and the downstairs is breezeblock. Upstairs and downstairs floors are concrete. The upstairs, but for the study, was re-lined during the repairs, and carpets were lifted. Any water damage to the bedroom, ensuite and living room, would have been apparent when the linings were removed. There is rust on carpet clean edge near the balcony door and water staining to skirtings. I note that the balcony handrails are fixed through the stucco leaving a risk of water ingress. The cladding is hard down on the balcony so any surface water on the balcony can migrate into the cladding. However, the rusted clean-edge and stained skirting are next to a south facing door, and the floor for the upstairs area is concrete on steel channels, so any water ingress is unlikely to

have created significant damage in any event. It has not been proven that the risk of water damage had eventuated before the earthquakes.

- (d) The east gallery/dining room, similar to the west gallery, is brick clad to the south and glazed to the north, with stucco parapets topping each face. The roof is flat; butynol over ply substrate. The south wall was re-lined during repairs, but no evidence of water damage to framing was seen. As with the west block any water ingress through high-risk features would have drained to the brick cavity to the south. There is more risk to the north side as the parapet sits above glazing. However, as with the west gallery, any water ingress would drain to the glazing joinery and be diverted by flashings. There is no evidence of pre-earthquake water damage in this area.
- (e) The kitchen is brick clad to the south and has full height glazed sliding doors to the north. These doors are bounded at each end by stucco columns with parapet caps. The south wall is low risk as it is brick topped by the pitched roof. The south wall was relined and if there was any water damage to framing it would have been noted during the relining. The stucco columns on the north side are high risk and amongst the features discussed above at [109] and [117]-[118]. The column to the east of the door and the adjacent parapet wall, sit beneath a cluster of defective and high-risk features, discussed at [118](a). This area was undoubtedly leaking before the earthquakes. The damage to this area is such that the earthquake damage and resultant damage from the defective repairs is *de minimis*. In other words, the remediation is driven by pre-earthquake water damage, not earthquake damage, or defective repairs. The pre-earthquake cause is excluded by the policy. The column to the west of the door sits beneath a parapet wall junction and an apron wall junction. The gutter ends were embedded in the stucco. No testing has been conducted nor were the internal linings replaced in this area. However, as discussed at [150](h) below, the pre-repair cracking on this column displays the same straight lines and square angles as that on the east pillar.<sup>53</sup> The pattern differs from cracks to other stucco elements which are more ragged and tend to

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<sup>53</sup> As seen in the pre-repair Miyamoto photography.

irregular angles. I conclude that the east pillar is more likely than not to have had pre-earthquake damage to framing and ply substrate, caused by water ingress. As above this is a cause of damage excluded by the policy.

- (f) The conservatory sits to the east and is connected to the kitchen. It is comprised of a low brick wall topped with aluminium framed glazing, which forms the walls and part of the roof of the structure. The central portion of the roof is pitched and finished with concrete tiles. There is no evidence to suggest the conservatory suffered from pre-earthquake defects (apart from the east column and adjacent parapet wall discussed at (e) above).

### **THE BUILDING ELEMENTS**

[123] I will consider the elements as follows:

- (a) the tiled roofing and the east retaining wall;
- (b) the butynol roofing;
- (c) the brick veneer cladding;
- (d) the windows, joinery, and flashings;
- (e) the stucco cladding;
- (f) the building's structural elements;
- (g) internal finishing; and
- (h) the downstairs bathroom.

[124] Because of the complex design of the building, a particular face of the building may have several elements present and there is overlap of issues where, for instance, there are junctions between different cladding types, or cladding and joinery.

### **The tiled roofing and east retaining wall**

[125] The tiled roofing was repaired by replacement of tiles with mis-matched second-hand tiles. There is agreement that the roof requires replacement. This replacement will include new tiles, new battens and roofing underlay. On the main block where a new stucco cladding system will be required, the new system is 40-50 mm thicker than the existing cladding system, this will require an extension of the roof framing, and there are no eaves in this area. On the east gable cut out, the additional thickness of the overclad and new mesh will also require additional roof framing.<sup>54</sup> The other areas which require a re-clad are on gable ends where the additional cladding thickness will be dealt with by the roof roll caps.

[126] Mr Whyte provides for replacement of the hidden gutters for the tiled roof to glazing junctions over the conservatory and Kitchen south east window. Ms van Eeden believes these do not need replacement. Although there is no evidence the hidden gutters were damaged, they form part of the roof system. Mr Pickering in evidence stated that the existing detailing would no longer be compliant. And Mr Milsom clarified that the flashings and channels which made up the hidden gutters constructed prior to 2005 were generally too narrow. As a result I find that, as with the anti-ponding boards, these hidden gutters must be replaced.

[127] It is agreed that the east retaining wall requires replacement. There are differences between the parties regarding methodology and the cost of the work. I deal with these issues in my considerations of quantum below.

### **The Butynol roofing**

[128] The butynol clad flat roofed areas have no signs of leaking. There are issues with ponding, which appear to relate to the sagging of the ply substrate between rafters, and with the slope of the roof. These are not earthquake related issues. The butynol and its substrate was not damaged by the earthquakes and was not repaired or worked on. However, it is argued by Mr and Mrs E that un-scoped repairs and remediation of defective work to adjacent pitched roofs and stucco parapets, mean that the butynol must be replaced, either for compliance reasons, or as enabling works to allow the roof and stucco to be worked on.

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<sup>54</sup> 'I' on figure 1.

[129] The first issue with the flat roofed areas is whether the butynol will be damaged during repairs to the roof or other adjacent elements. To access the tiled roof, roofers must walk across the butynol areas and there is a risk of damage caused by foot traffic and inadvertently dropped tiles and tools. However, Mr Whyte's evidence was that the use of protection sheets and boards would prevent this.

[130] Mr and Mrs E argue that the current butynol upstand is insufficient. The upstand is the amount of butynol which extends up underneath roof tiles to avoid overflow, should either a drain be blocked, or heavy rain exceed the capacity of the drainage. The current butynol has an upstand of 50mm, whereas under current building requirements this needs to be 150mm. Mr Whyte argues that a new strip cannot simply be glued on to the existing butynol as the age and weathering of the butynol makes this problematic. Mr Creighton and Mr Milsom considered that the aging was not an issue as the top of the butynol upstand has been protected from weathering as it is underneath tiles and building paper. The butynol is part of a roofing system which is still weather-proof and is, therefore, compliant.

[131] Replacing the pitched roof tiles will require the addition of flood boards which work with the upstand. This is new work which must be current code compliant. Adding a strip to the upstand will address the issue of compliance. It was argued that a competent contractor would not issue a warranty for an extension to the upstand, but I am not persuaded that this is relevant if it is in fact the case. This is because, as discussed above at [80] the BA implies warranties for any new work, and in any event the work will make the roof system more compliant than it was previously.

[132] As discussed below there are areas of stucco over flat roofed areas which require replacement. In these areas the butynol laps up behind the cladding. It was put forward by Mr Pickering that removing the stucco from the parapet areas has a high likelihood of damaging the butynol. However, his concerns were not shared by Mr Whyte or Creighton, and it also it also appears that the brick replacement during the 2013 repairs, which involved similar issues with grout on butynol upstands did not cause issues.

[133] The butynol was not damaged in the earthquakes or when the repairs were carried out, and it can be adequately protected while adjacent works are completed. I am not persuaded that the butynol requires complete replacement for compliance reasons. IAG is liable for the

cost of gluing an additional strip of butynol to extend the upstand as this is a cost of compliance covered by the policy. The policy will respond to patch repair any damage which occurs when adjacent stucco areas are remediated, as part of the contingencies included in the Whyte Construction Ltd Scope.

### **The brick veneer cladding**

[134] All faces of the building have some brick veneer as cladding, and it also forms decorative elements in the form of archways at the entrance to the building and over the path to the west of the garage. The brickwork suffered significant damage, as shown in the Miyamoto photos. This included cracked bricks, step cracking of mortar joint, shear cracks through whole corner sections of bricks and individual bricks falling out of mortar. The emergency repairs included bracing to stop the double height sections from falling away from the house. The scoped repair was to replace all brickwork. This was a suitable, and entirely reasonable response to the damage.

[135] A number of issues have been identified with the replaced brick veneer. These include allegations that the repairs should have been subject to a consent or exemption, that the shelf angle was not re-installed and issues with the workmanship.

### *Defects*

[136] Mr Tolley conducted invasive investigations by probing into weep holes with a folding ruler and using an endoscopic camera which can investigate small spaces. The inspections of the brickwork conservatory area are instructive. The low veneer wall, topped with sills where brick can be removed, is an area where the issues could be seen with minimal damage caused by destructive testing. However, in locations where the brickwork is full height or double height, weep holes were blocked or had not been installed making similar investigations impossible. The brickwork shows a number of defects:

- (a) **Insufficient cavity issue width.** Mr Milsom and Mr Tolley were of the view this should be 40mm at a minimum. Mr Wilson and Mr Davison suggested that research had shown that 20mm was preferable, although it was conceded that this was for monolithic and weatherboard systems. The 40mm minimum is by all accounts a very old standard practice, and the manufacturers'



recommendation. I find that 40mm is the minimum gap required. In terms of whether the as-built brickwork was compliant in this regard, the original brickwork is likely to have been inspected by Council and the Architect during construction and this is an area where non-compliance which would have been noted. Moreover, plaster and paint lines on soffits and undersides of parapets show that the replacement brickwork is set back further than the original indicating a narrower cavity. Mr Davison and Mr Wilson thought this was an isolated issue in only a few areas. However, the plaster and paint lines seen on photos and Mr Tolley's investigations show this was an issue at: the conservatory, the south east corner of the kitchen, at the area around the front door, beneath the balcony on the south of the main block, around the west block, and on the double height sections of the main block. From the discussions of the witnesses it appears that the gap has occurred in part as parapets, soffits, and guttering were not removed in these areas before the brickwork was replaced. In the original construction these features were installed after the brickwork was constructed. The lack of cavity depth means that the brick veneer cannot perform as required by the building code in terms of drying.

- (b) **Mortar bridging the cavity.** This occurred when too much mortar was applied and squeezed out the back of the bricks. The issue was compounded by the lack of a 40mm cavity, which would have allowed room to trowel away excess mortar. The bridging has two negative effects; it reduces air circulation and allows a pathway for moisture to transfer from the bricks to framing. The issue was visible in the conservatory area where there was access to the cavity but is likely to be present elsewhere.
- (c) **Weep-holes which are either blocked or not installed.** Weep holes allow water to drain from the cavity behind the brick. In areas around the front door, the east block, and the west double height sections of the central block; weep holes were either not installed, were blocked, or had been covered by paving. Around the east double height brick section of the main block and the conservatory Mr Tolley was unable to insert his ruler the width of the bricks, as weep holes were blocked. As with the bridging, the blockages appear to

have come from excess mortar falling to the bottom of the cavity. In evidence Mr Wilson and Mr Davison agreed that if widespread this would be a significant issue, as any water entering the cavity would not drain away and would be more likely to enter the framing of the dwelling. It was agreed that all paving needed to be replaced.

- (d) **Building paper.** It is unclear whether building paper was replaced or re-used when the brick work was replaced. Mrs E 's evidence was that in some areas the building paper was re-used, with holes or rips taped up. Reuse is problematic as the brick ties used to secure brickwork to frames pierce the building paper and the open holes allow water ingress. Furthermore, the building paper is part of the building's water-proofing system along with the bricks. It was agreed by all but Mr Davison that it was good trade practice to replace the building paper when brickwork is replaced. There was some discussion about whether the brick-ties had been removed or reused. Mr Wilson was unclear, and Mr Davison thought they could have been re-used. However, Mr Milsom and Mr Tolley observed that ties had been re-used in the low height wall around the conservatory, but not for the full and double height walls around the rest of the house. This is because the small variations in mortar thickness would have built up for the higher walls meaning the ties and mortar lines would not line up. I find that the building paper was likely to have been replaced on the double height sections. There is a section on the top of the double height brickwork at eastern side of the central block where either the building paper has slipped or was not installed. Mr Tolley was able to insert his ruler 250mm into a breather hole in the top course of bricks, meaning no building paper was present, or it had slipped.
- (e) **Shelf angle.** I have found that the shelf angle was originally installed. However, testing by Mr Milsom using a very strong magnet showed that it was not re-installed when the brickwork was replaced. While Mr Wilson and Mr Davison were not convinced that the magnet would pick up the presence of the shelf angle through 20mm of mortar, Mr Milsom explained that the same magnet can detect smaller metal fixings through deeper thicknesses of cement. I find that based on this evidence, on the balance of probabilities the shelf

angle was not re-installed. There is a question about whether the shelf angle was necessary from a structural perspective. However, the shelf angle was part of the consented plans, without it the house no longer complies with its as built consent. As discussed above, building code performance is a floor not a ceiling. It would be unsustainable to interpret the 'as when new' requirements as requiring only that an arguably overbuilt dwelling is rebuilt to minimum standards. I find that the shelf angle must be re-installed. It will also require fresh consent and design by an engineer as it is a change to the building's structural performance from its repaired state.

- (f) **Top course bricks improperly installed.** An issue in a number of areas is that the bricklayer has not properly installed the top course of bricks. When originally built the brickwork was installed before gutters, parapets and soffits were installed. This means the original brick layer had room to work and that these features were installed hard down on the brickwork, which meant there were minimal gaps into which water could penetrate. In the replacement brickwork the bricklayer has not properly installed the top course. The experts believed that the bricklayer did not properly sequence their work; by working bottom up they gave themselves no room to properly install the top course. Rather they used off-cuts of fibre cement board to prop the back of the top course and installing only 20mm of mortar at the front of the bricks to hold those bricks in place. Mr Tolley observed this on the wall between bedrooms two and three and confirmed it through his endoscope. He also observed cracking around the top-course of the entire building. Mr Wilson said he had not observed it as widely. These bricks can be removed by hand. In internal corner areas the issue is also apparent.
- (g) **Sills and window openings.** Brick sills should be installed at a minimum of 15 degrees to allow for water to run off. Most sills have lower sill angles since the repairs were carried out, which will lead to increased moisture absorption by the sill bricks. A number of sills also have only 1-3mm of cover by the joinery above, causing a risk of water blowing under the sills. This issue is exacerbated by the lack of sill flashings in several areas. All the experts agreed the sills need to be re-installed.

- (h) **Slab overhang.** There are four areas where the brickwork overhangs the foundation slab by more than 20mm. This is a structural issue as the greater overhang increases overturning forces on the brickwork and brick-ties under seismic loads. The engineers considered the forces involved and reported that the overhang was an issue in terms of having a worse structural performance than the original brickwork, and that to remedy the issue would require additional brick-ties, an extension of the slab edge or the installation of a shelf angle or similar.
- (i) **Mortar splatters and chipped bricks.** There are approximately 100 bricks across all faces of the building with mortar splatters which were not correctly cleaned when installed. There was discussion about whether the mortar can be removed using a wire-brush and brick-acid. I find that the mortar can be removed. The fact that it wasn't adequately cleaned off was commented on by Mr Davison, who was of the view that a competent tradesman would have produced a different result. There are also a number of chipped bricks which are unsightly. However, these are not overly noticeable, as the bricks have a "rustic" finish. However, there are issues with matching replacement bricks. Mr Whyte and Mr Moore advised that batch differences and weathering meant that matching new with existing bricks was impossible. Mr Creighton did not believe this was an issue, however, when questioned about warranties for new sections of brickwork, he advised that it would be possible to identify new sections of brickwork by colour differences. Due to differences in light and shade, and visibility, it is not necessary that brickwork different faces of the building are exact matches.<sup>55</sup>
- (j) **Entranceway arch.** The entranceway arch brickwork was replaced. This archway has a preformed arch, presumably of concrete formwork, with the bricks bonded to this substrate. As it has no keystone and the arch is of a flat shape, the bricks are not self-supporting. The bricks cladding the arch and its supporting pillars are purely decorative, they back onto concrete. It was argued that there was a health and safety risk, as it could not be shown what was

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<sup>55</sup> See Chair Sommerville's approach in *DG Family Trust v IAG & Ors* [2019] CEIT 0037-2019, at [200].

holding these up. However, I do not find this to be the case, the bricks have stayed in place through the Kaikoura earthquake and by all accounts appear to have been properly installed.

- (k) **Brick to stucco junctions.** When the house was originally built brickwork was completed first then stucco render applied after. This means that the render would have been plastered hard up against brick. Over time these junctions would invariably have cracked. However, the cracking which is visible on the Miyamoto photos is relatively small. When the brickwork was replaced, the layer has had to insert new bricks into the gaps left when the originals were removed. These are rustic bricks and irregularities are part of the aesthetic. Unfortunately, this also means that the new bricks fit poorly into the existing stucco on vertical corner junctions where stucco meets brickwork. In areas where there was previously a gap of a few millimetres, the gap is now significantly larger and will allow more water to enter. In some instances, sealant, mortar or paint has been applied, however this has cracked or fallen out. These repairs do not comply with the 'as when new' standard, or the Clause 1 requirement that repairs do not worsen compliance. The junctions affected are:

- (i) the south kitchen/ conservatory junction;
- (ii) all junctions on the north end of the main block;
- (iii) the junctions between both west and east double height brickwork and stucco to the south of the central block;
- (iv) the junction between central block brickwork and the east gallery parapet;
- (v) the entrance pillar brickwork junctions to the study south wall stucco, the mortar used to fill the gaps has fallen out exposing building wrap and timber; and

- (vi) the junctions between stucco around the front door and the adjacent brickwork.
- (l) **Other issues.** There were other defects, which were not disputed. These include:
  - (i) gaps between bricks, or between bricks and joinery where either not mortar was not used, or it had fallen out; and
  - (ii) improperly sealed penetrations.

### *Consent*

[137] As discussed above the brickwork appears to fall within the exemption in Clause 1 as it is the like-for-like replacement of a building element. However, by my calculations, the brick veneer covers well over half of the external walls. Replacing the veneer was not a small repair job for maintenance purposes. While the MBIE advice suggests that replacing the brick veneer is exempted work, the Christchurch City Council (CCC) guidance clarifies this. The CCC guidance uses replacement of a cladding system for a single-story building with minimum 450mm eaves and simple cladding intersections, located in a low or medium wind zone as an example of works considered exempt. None of those mitigating factors are present in this case. While I acknowledge that the guidance is aimed at wholesale replacement of cladding, it is instructive. The repairs also involved the removal of a structural component, the shelf angle. This was a change to the consented structural performance of the building and sits outside of the exemptions.

[138] Comment was made that a fresh consent application was not a strict legal requirement under the BA. Given this case is about failed repairs for extensive earthquake damage under an insurance policy, I am unimpressed at this position. The consent process is designed to ensure that work is done properly, either by requiring Council inspections, certification by a designing Architect or Engineer, or by proper documentation by the Licenced Building Practitioner who carried out the work. None of these occurred here. This failure of oversight has left Mr and Mrs E with a defective building, which requires a second round of extensive remediation work. It is clear to me that a prudent builder faced with replacing a significant amount of brick cladding would have sought a fresh consent, or an exemption at the very

least. When the full extent of the other work carried out is considered, the failure to seek consent or exemption for all the repairs was inexcusable. Suggestions that the pressures in 2012 meant that it was unrealistic for builders and trades to keep records of works, or even photos of the work they were doing, also fail to impress me. These were not emergency works which were intended to be temporary and so standards could be lower, they were meant to be lasting repairs to restore the house to its pre-earthquake condition.

### *Discussion*

[139] There was general agreement amongst the experts that the replacement brickwork was poorly laid. In part the re-installation was hampered by the need to work around existing features, but a careful and competent bricklayer would have avoided these issues by properly sequencing their work. Either Falcon or the bricklayer decided not to reinstall the shelf angle despite this being a structural change and part of the existing consented design. The cavity depth, slab overhangs, sill angles, top courses, and sill clearances are not compliant, mortar splashes were not cleaned off and chipped bricks were used, failing to meet the aesthetic requirements of the ‘as when new’ policy wording.

[140] IAG have already agreed to replace the conservatory brickwork. Mr Davison and Mr Wilson believe that the conservatory is the worst of the workmanship and isolated remediation can address issues in the other areas. I disagree. The conservatory issues are simply more visible due to the low height of the brickwork and ease of removing sills. The low height would also have made the issues of mortar entering the cavity easier for the bricklayer to notice and correct, but this did not occur. I cannot see that when working on the west block, as an example, a competent bricklayer would have laid 29 courses of brick carefully and compliantly, then chosen to negligently install the top course as they had not sequenced their work properly.

[141] Mr Wilson and Mr Davison were of the view that the brickwork was performing, as there was no evidence that the defects had caused water ingress, and this was picked up in Mr Cuff’s comments that the Code is a performance standard. However, this ignores the requirements of the BA that repair work leaves the whole building better, or no worse than before the repair, and the policy which requires ‘as when new’. In many respects the brickwork and other elements are less compliant than before the repairs were carried out.

[142] The argument that a building is compliant simply because it is not leaking ignores that the Code specifies future performance. The future performance of a building component is certified based on manufacturer's and Building Research Association of New Zealand (BRANZ) testing, and by the acquired wisdom of generations of tradespeople which informs good trade practice. Where a component has not been installed in accordance with good trade practice or manufacturer's specification its future performance cannot be known. It is unhelpfully simplistic to argue an element can be said to be compliant simply because it is not currently failing.

[143] Since it was repaired the brickwork is plainly worse in almost every respect than its pre-earthquake condition. While not a building defect per se, it is indicative of the carelessness of the bricklayer that Mr Tolley's invasive inspection found a plastic bag in the cavity to the east of the conservatory. The evidence is such that I can make a robust inference that the workmanship issues are common across all the replaced brickwork. Beyond the entrance archway, there is practically no part of the brickwork which does not require remediation in one way or another. Targeted remediations, even if carefully carried out, are likely to result in more issues with sequencing, colour matching, and potential problems. I find that the brickwork must be replaced in its entirety. This will involve replacing the building paper and brick ties. The existing building paper and ties are likely to have been damaged by the repair process, replacement is prudent and re-use will not meet the 'as when new' policy requirement. The significant area requiring re-cladding means that a fresh building consent must be sought.

[144] As all of the brick veneers need to be replaced, the issues of cleaning mortar spatters and replacing chipped bricks do not arise. This also means that the archway brickwork requires replacement; as was mentioned by Mr Harris, matching the bricks for the archway with the other walls on the south face of the building would be difficult. With regard to the junctions between brickwork and stucco junctions, the necessary remediation is discussed below.

### **Stucco cladding**

[145] The stucco cladding is present to some degree on every section of the building except for the garage and conservatory. It is used as cladding on the south upper floor of the central



block, on all gables, is used to form parapets edging the flat roofed galleries, and forms full height columns around glazing on the north aspect of the central block, the dining room/east gallery, and kitchen. Transitions between the dining room, kitchen and conservatory are formed by stucco columns topped by parapet walls.

[146] Stucco is a cement-based render, reinforced with chicken wire and, in the present case, applied over 12mm ply substrate. The ply is fixed direct to framing with building paper underlying the ply, providing waterproofing. The stucco itself is a brittle material, and it and the substrate move with heating, cooling, and humidity. As the ply and stucco have different behaviours, cracking occurs. The ply is fixed to the house framing and the house itself moves. When applied as it dries and cools, the stucco forms cracks. Where stucco joins brick work, cracking occurs due to the different behaviours of the two materials.

[147] The chicken wire embedded in the stucco provides some stability, but all stucco will crack. To deal with cracking the stucco is coated with a flexible paint system which can bridge smaller cracks. Under current standards, horizontal or vertical control joints are used to allow for some movement to limit cracking.<sup>56</sup> However, when the house was built control joints were less common and were not used in this case.<sup>57</sup> As I have found above, the two pillar features and adjoining parapet walls on either side of the kitchen doors were leaking to a point where the framing was likely to have sustained damage prior to the earthquakes.

### *Damage*

[148] Given the severe shaking of the house, and the damage to internal linings discussed below at [174]-[178], and stucco's brittle nature, the damage to stucco is unsurprising. The worst affected areas were adjacent to sections of brickwork which suffered cracks wide enough for a finger to be inserted.

[149] In the CES events the stucco suffered cracking and spalling. As with other damage there is a sparse documentary record of the damage. IAG's initial assessment noted cladding damage. The Miyamoto photos are taken from ground level, so lack detail, but show a

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<sup>56</sup> NZ4251.1:2007 Solid plastering – Cement plasters for walls ceilings and soffits published 28 February 2007.

<sup>57</sup> The previous standard NZS4251:Part1:1998 requiring control joints was published 27 July 1998, the final building consent approval was 9 March 1998.

number of the affected areas. The cracks seen in the photos cannot be accurately measured from the photos but were significant enough to be visible from a distance.

[150] It is possible to see what was damaged by the current state of the stucco. Mr Tracey recorded 80 current cracks in his crack map, and these cracks are also captured in Mr Tolley's photographs. Some of these cracks show changes of texture which indicate that they were repaired. Others propagate from the corners of joinery and the internal, angled, junctions between walls. Some cracks viewed close up, show signs of repair. Some cracks show signs of opening above and below, or immediately adjacent to repaired cracks. I find that most of the cracks shown in the crack map are more likely than not to have been caused by shaking during the CES events which have re-opened since repaired. Considering the evidence, I find the following stucco damage occurred in the CES events:

*Main block*

- (a) the north aspect and immediately around both corners to the east and west, extensive cracking and spalling from all four corners of the main window, cracks from the top corners of the side windows which extend around the edge of the column for the full width, and spalling at the base of the east column at ground level;
- (b) the north east and north west upper story windows, cracking from the top corners;
- (c) the parapets above the west and east double height brick sections, vertical cracks mid way along the parapets and cracks at the parapet corners;
- (d) the upper story windows on the east and west faces of the central block, cracks propagating from the corners of the windows;
- (e) the parapet junctions where the south and north walls of the galleries meet the main block, numerous cracks to the main block stucco, propagating from the parapet corners;

- (f) the south study wall, a long crack at the top left edge and diagonal cracks from the top corners of study door on both sides; and
- (g) separations between the cladding between the main block and the parapets above the double height brickwork;

*East block*

- (h) the east and west columns on either side of the kitchen double doors, and the adjoining parapet to the east, several horizontal cracks on each column and vertical cracks to the parapet and junction between parapet and east column;<sup>58</sup>
- (i) the east gable, a severe crack and spalling at the bottom corner next to the kitchen window and diagonal cracking across the wall; and
- (j) separation and spalling at the right-angle junction between the column to the south connecting the conservatory to the kitchen;

*West block*

- (k) the west gallery, south wall parapet, vertical crack;
- (l) the north gable wall, cracks propagating from the intersections to the bathroom parapet on both sides, and on the gable wall itself;
- (m) the east parapet, above the laundry window, small, vertical crack; and
- (n) the south gable wall, a long diagonal crack visible from the driveway.

[151] An aspect of the damage that was not originally assessed is the potential for damage to the ply substrate and the fixings which connect it to the framing. The following exchange of the engineers under questions from Mr Milsom is instructive:

BRUCE MILSOM: Can I just ask the engineers that if there was sufficient forces to create diagonal cracks in the internal linings that they needed replacing then does that

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<sup>58</sup> 'A' and 'D' of figure 1.

mean that there could be some damage to the plywood substrata holding the plaster cladding? It could've loosened the fastenings or torn the fastenings through the plywood.

KEVIN SIMCOCK: I would say yes if there's been sufficient movement to cause substantial diagonal cracking. Some of the cracks we're seeing here are substantial. Then yes, there could have been some damage to the ply as well. The ply should be stiffer than the Gib. So if it's –

BRUCE MILSOM: But if there was enough movement to cause those cracks it means the wall has moved that much irrespective of how strong the plywood is.

KEVIN SIMCOCK: Yeah. Do you agree?

MATTHEW HARRIS: Agreed.

[152] Mr Wason also referred to the possibility of weakening of the fixings of the substrate, although he had not conducted the physical test which would confirm this possibility had eventuated.

[153] I note:

- (a) There was extensive internal damage to Gib inside the main block, and the kitchen (discussed in detail below);
- (b) the gable ends in the kitchen were racked out of vertical by 25mm over the height of the gables (discussed in detail below);
- (c) the fact that the repaired stucco had re-cracked by February 2017, when the cracks were noted in the Four-corners report; and
- (d) the widespread, albeit minor, damage to Gib linings caused by the relatively gentle shaking experienced during the Kaikoura earthquake.

[154] It is likely that the substrate fixings were affected by the CES events, however this was not assessed by Falcon, IAG or Hawkins. I find that it is reasonable to infer that for the east block gables, the gable and parapet above the west block bathroom, and the main block the ply substrate fixings required remediation and still do. This is because these are areas where significant stucco cracking occurred on the outside of walls which suffered significant Gib damage to internal linings.

[155] Apart from the stucco on the columns on the north side of the kitchen, the stucco damage has been caused wholly by seismic shaking.<sup>59</sup> While, as found above, there were other areas with the risk of water ingress, the rate of wetting had not reached a point where the substrate or framing was damaged.

### *Repairs*

[156] As with other aspects of the repairs, the lack of records makes knowing what areas were worked on difficult. All that can be shown is that all the stucco was re-painted, although the experts agreed that the quality of the painting is poor and patchy. A clear example of the problem is the question of what repairs were done to the northern aspect of the central block. The stucco in this area may have been re-clad, partially re-clad, or the cracks may have been ground out, meshed, re-rendered and re-painted.

[157] The form 720 includes “[r]epair cracks and plaster” for an area of 28m<sup>2</sup>, and “repaint existing exterior cladding (including all preparation)” for 215m<sup>2</sup>. On 7 May 2013 an email records a variation; “[p]laster repairs and painting to plaster areas went from patch cracks to covering all areas”, it is unclear if this means re-render and paint, or re-paint. The windows at the north end of the master bedroom were replaced, requiring plaster to be ground out for flashings. There was a variation for plaster to be ground out to allow for flashing a bay window over a flat roof area, but it is unclear where. The producer statement completed by the plaster repairer, Dean Taylor on 4 December 2013, records “*patch solid plaster and repaint*”.

[158] In some areas differences in texture suggest cracks were re-rendered. This was noted by Mr Wason, Mr Flewellyn and the building survey experts. It also appears that grout, or filler was used to fill some cracks, and others were painted over. The evidence is that cracks less than 1mm wide could be painted over in some instances. Wider cracks require re-meshing and a skim coat. The evidence shows that the repairs were not done well.

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<sup>59</sup> ‘A’ and ‘D’ on figure 1.

[159] I conclude that the following stucco repairs were carried out:

*Main block:*

- (a) The north end, back as far as the double height brick sections was re-rendered entirely, it appears that some new mesh was installed, although it is impossible to say how much or where. No control joints were added, although the evidence is that these were necessary.
- (b) The cracks on the parapets above the double height brick sections were painted.
- (c) The cracks at the upper story windows, south of the double height brick sections and where the gallery parapets join the stucco were re-rendered. It appears that the repairs did not involve new mesh.
- (d) The cracks on the edge the south study wall, and around the balcony door were painted.
- (e) Internal corner separations were repainted.

*East block:*

- (f) The cracks to the kitchen pillars were repainted.
- (g) The spalling and crack at the bottom corner of the east gable were re-plastered and painted. It appears no new mesh was used.
- (h) The cracking across the body of the east gable was re-plastered and painted.
- (i) The separation and spalling at the right-angle junction between the kitchen and conservatory were repainted.

### *West block*

- (j) The crack to the west gallery parapet was re-painted.
- (k) The north gable and bathroom parapet cracks were repainted.
- (l) The crack to the south gable end was repainted.
- (m) The on demand hot water unit, which sits around the corner from the south gable of the west block, was replaced with a smaller unit, after the house was repainted, leaving mis-painted stucco. The old screw mounting holes were plugged by re-inserting tek screws, rather than properly plugging the holes.

[160] Neither a fresh building consent, nor an exemption were sought. Looking at the stucco as an isolated element, this was justifiable; the repairs were largely in the form of maintenance, and do not appear to involve replacement of significant areas of stucco. However, it is artificial to view a building as a collection of elements in isolation. In conjunction with the brickwork, the cladding repair works involved every external element apart from glazing. Faced with the scale of the repairs, a prudent and competent builder would have sought consent or an exemption.

### *Discussion*

[161] The stucco repairs have failed. Most, if not all, of the repaired cracks discussed above have re-opened. I conclude this as, when post-repair photos are put alongside the Miyamoto photos, the cracks coincide. In areas which cannot be seen in the Miyamoto photos it is legitimate to infer that the current cracks are earthquake related, as the cracks display similar characteristics to those visible, and were repaired by the same tradesman at the same time. The paint work is patchy and thin and in places a single, inadequate, coat has been applied. In other places new render was left unpainted. It was the view of Mr Wason, Mr Flewellyn and Mr Milsom that the producer statement signed by the stucco repairer should not have been issued as the gaps at junctions meant water would enter and affect the substrate.<sup>60</sup>

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<sup>60</sup> A PS3 form certifying that the work completed complies with BA and BC requirements.

[162] Repairs to a building are new work and so need to meet the Code durability requirements, which for cladding is a 15-year life. The cracks discussed above were repaired in 2013 but had re-opened by February 2017. It is possible that the cracks were re-opened by the 2016 Kaikoura Earthquake. However, the forces imposed on the house by that event were slight, and building work is required to withstand such an event with little or no damage. Because we have so little evidence of the assessments, it is unclear whether the scoping was inadequate, or the work was not properly carried out.

[163] I am unimpressed at the suggestion that the cracks are caused by inherent pre-earthquake defects in the stucco. There is no evidence of cracking prior to 2010. While stucco tends to crack, cracks of the length, location, and number seen at the house in its present state cannot be explained by anything other than earthquake damage and failed repairs.

[164] Mr Davison, Mr Tracey and Mr Wilson all referred to BRANZ guidance which allows for cracks less than 1mm wide to be repainted. Based on this they concluded that the repainting discussed above was a suitable repair. However, Mr Wilson and Mr Tolley also discussed the need for judgment in considering a repair methodology. Mr Wilson commented that it was appropriate to repair cracks in stucco, but the repairs in this case were not done to the required standard. He also commented that “*had [the crack repair] been done appropriately there’s no reason the cracks would have opened again*”. This comment is telling.

[165] When questioned about what a plasterer would do when faced with issues such as a lack of control joints or damage to other building components which affect their work, the experts suggested that a plasterer will simply do their work and leave those issues to others. However, in this case those others; the bricklayer, and builder followed the same pattern. The dearth of project management oversight meant there was no controlling mind co-ordinating and making sure that issues, such as the smaller profiled gutter ends, or the possibility that substrate and bracing system had been damaged, were addressed. As stated above and worth repeating, the checks and balances Mr and Mrs E could reasonably expect to have occurred; inspections, certification, and proper documentation are almost entirely absent in this case. As found in *Sleight*, the lack of project management resourcing can be laid firmly at IAG’s door, as can the inadequacies of the damage assessment.



[166] IAG have argued that the remediation for the stucco elements is sought because they are leaking, rather than for defective repairs. In effect the argument is that the earthquake damage, and post-repair cracking are *de minimis* when set against what IAG alleges is the pre-earthquake defective condition of the house. IAG faces a problem in making this argument: it had assessed the earthquake damage, found relatively extensive damage to the stucco, and paid for that damage to be repaired. The time for making a *de minimis* argument was in 2012. Beyond the fact that IAG's own assessment did not suggest excluded causes, the subsequent defective repairs and passage of time present difficulties in proving that excluded causes of damage are now in effect. I have found the earthquake damage was more extensive than that assessed. I also have no doubts that the cause of the present cracking is the failure of the repairs. It is hard to reconcile the position that the remediation works now sought are for pre-earthquake defects and damage, with these findings.

#### *Remediation*

[167] The various experts have proposed a variety of remedial solutions to address IAG's policy liabilities. All agree that as a practical consideration, the stucco cladding needs replacement with a cavity back system. Where they differ is what is driving the need to reclad; the earthquake damage and failed repairs, or the risk of water ingress presented by the building design. Only the first of these issues falls within the policy cover, as the second is an excluded clause, and not something for which IAG can be liable.

[168] The various repair strategies proposed by the experts are:

- (a) Mr Wilson – rake cracks, add mesh and a 6mm coat of plaster.
- (b) Mr Davison – repaint, as all cracks are less than 1mm and only one is larger than 0.5mm.
- (c) Mr Tolley and Mr Pickering – replace all stucco with a cavity back stucco system.
- (d) Mr Flewellyn, – replace all stucco, as the re-cracking is a failed repair. He would consult a building surveyor and considered that there would be difficulties in re-using window and door joinery.

- (e) Mr Wason – thought the StoMat system produced by his employer could be used but only if it was proven that the ply substrate was solid and load bearing.<sup>61</sup>

[169] My considerations are complicated by the fact that since the house was damaged, it has had open plaster cracks for the periods before the repairs and since February 2017, a combined period of at least 6 years. This was referred to by Mr Tolley and Mr Milsom. The substrate is H3 treated ply, which means that the timber treatment is likely to have prevented any significant water damage to the ply itself. However, any moisture penetrating the stucco will have acted as an anode between the stucco and the embedded wire mesh, causing corrosion. If cracking has allowed moisture to reach the ply substrate the moisture will have caused the ply to swell causing more cracking. In areas with few cracks this is less of a probability, however, in those areas with significant cracking, such as the areas where the gallery parapets intersect with the central block, it is more likely.

[170] The approach I take is that where a repair has failed and a crack has reopened, the previous repair strategy will not produce an acceptable remediation and more substantial remediation is necessary. Reviewing the various proposed remediations and the damage I find that to meet its policy obligations IAG is liable for the following remediation work:

- (a) A fresh building consent will be sought for the stucco remediation. This is due to the scale of the works as discussed above, and the fact that the stucco repairs failed in less than four years. In doing so the repairs have failed to meet the Code's 15-year durability requirement for cladding. Therefore, the BA exemptions do not apply. This means that for areas which I require to be re-clad the replacement cladding will need to be over a compliant cavity system to meet current code requirements.
- (b) All stucco will be re-painted whether repaired, replaced, or left. This is to match the areas where replacement and repair are necessary, and to address areas which were not painted during the repairs.

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<sup>61</sup> A proprietary remedial system where stucco is re-meshed and over-plastered.

- (c) Where a face is re-clad or re-plastered, and the size of the area, or the presence of windows, necessitates the addition of control joints under the guidance, these are to be added for compliance.
- (d) The stucco clad elements to the north, west, and east aspects of the main block, (but for the parapets over the double height brick clad areas), will be re-clad. The north aspect was the area with the most excessive damage and the most comprehensive repairs, which have failed. These elements are on the external faces of walls which suffered significant damage to internal Gib lings, and the substrate and fixings are likely to have sustained damage. Moreover, there is a large amount of joinery in the area, some of which already requires replacement. The problems of part replacing the stucco in this area are already apparent from the failed repairs. This reinstatement will also address the issues with brick to stucco junctions in this area.
- (e) The parapet walls above the double height brick elements will be over meshed and re-plastered. These areas suffered a single crack. However, the repairs have failed showing the targeted repair strategy was unsuitable. These areas catch light and shade and due to their prominence, patch repairs will be unsightly.
- (f) The south study wall will be meshed and re-plastered. This will also address the gaps between the brick pillars and the stucco base. This area is visible from the driveway and catches light and shade, so a patch repair will stand out and be unsightly.
- (g) The parapet and gable at the north elevation of the east block (the exterior of the bathroom) will be re-clad. There is extensive cracking which has re-opened and the Gib linings in the bathroom were replaced. Therefore, the substrate is likely to have been affected. The replacement stucco will need to be over a compliant cavity system.
- (h) The entire south gable of the west block will be meshed and re-plastered. The cracks while fewer in number are long and have re-opened. This area is visible

from the driveway and catches light and shade, so a patch repair will stand out and be unsightly.

- (i) The crack to the parapet above the laundry window will be patch repaired with new mesh and a re-render. This crack is shorter than other similar parapet cracks.
- (j) The west gallery south parapet crack will be patch repaired with new mesh and a re-render.
- (k) The east gallery south parapet will be re-clad to address the cut-out from Mr Tolley's destructive test at site 1. The cut out was a necessary part of the assessment process, which should have been carried out in 2012. The defects in assessment and repair have made the repair of the test site enabling works.
- (l) The west gable of the east block will be meshed and re-plastered. The cracks while fewer in number are long and have re-opened. This area is visible from the driveway and catches light and shade, so a patch repair will stand out and be unsightly.
- (m) The east gable of the east block must be re-clad, due to the number of cracks and the fact that the internal damage was significant.
- (n) The columns on either side of the kitchen double doors require remediation but IAG has no liability as the pre-earthquake damage means the earthquake cracking was *de minimis*.
- (o) The stucco wall to the south of the kitchen/conservatory junction will need to be re-clad to address the cut-out from Mr Tolley's destructive test at site 2. As above these are enabling works.
- (p) All brick to stucco junctions outside of areas to be re-clad or re-plastered will need to have the stucco removed as far back as necessary to allow for the installation of new, complaint flashings and new mesh and plaster installed to address the gaps where brickwork was replaced.

### **Windows, joinery, and flashings;**

[171] The earthquake damage included damage to window joinery. This necessitated the replacement of windows in the kitchen and on the north aspect of the main block. The replacement windows on the north of the main block appear to be smaller than the originals and are missing jamb flashings and WANZ bars were not installed. Jamb flashings are where in the original construction, building wrap extended around framing into which window joinery was inserted, creating a weather seal. When the windows were replaced the building-wrap was cut and was not correctly reinstated. WANZ bars are structural supports, without which the weight of the glass bears down on the cladding.

[172] The experts were at odds over the extent of the issues. However, all windows and door joinery on west, east and north faces of the main block will need to be replaced to address the increased depth of the replacement cladding. In evidence it was apparent that the lack of a repairer for aluminium joinery in Christchurch meant that it was cheaper to replace the window units than send them to Auckland to be altered or repaired.

[173] In the kitchen the large window unit at the south east corner was replaced. The experts (apart from Mr Wilson who was not present) agreed at the conferral that the unit was improperly installed, lacking adequate fixing and with no WANZ bar. The weight of this large unit means that it has dropped out of level and is leaking. It was agreed that it required replacement

### **Structural elements;**

[174] Much of the discussions between Mr Harris, Mr Simcock and Mr Knowles related to issues which are dealt with elsewhere. The stand-alone structural issue they discussed was the bracing of the building elements.

[175] During the Port Hills earthquake there was significant damage to linings, including diagonal cracking. This required approximately 75% of linings to be replaced. Bracing is the means by which buildings can withstand lateral loads, largely caused by wind-loading and seismic forces. In modern timber framed buildings, wall lining systems, such as Gib board and its fixings, provide an in-plane membrane and form a part of the bracing system.

Diagonal cracking to Gib, such as occurred here, shows that the house has experienced lateral seismic forces which exceeded the building's bracing capacity.

[176] The engineers estimated that, during the Port Hills earthquake, the house suffered peak ground acceleration of greater than 0.35g, in excess of the design criteria for an Ultimate Limit State (ULS) event, a design event based on the forces from a 1 in 500 year earthquake. A ULS event will put forces on a building which it must be designed to withstand without suffering collapse. Under ULS conditions the structure may be irreparably damaged, but it should still protect human life.

[177] Both Mr Harris and Mr Simcock were of the view that the extent of the damage to the Gib linings showed bracing failure. Their evidence was that the replacement of approximately 75% of linings was the substantial replacement of a component or assembly contributing to the building's structural behaviour. Therefore, consent should have been sought.

[178] The evidence of the engineers was that the failure of the Gib should also have triggered a recalculation of the bracing schedule. Gib board has a variety of different products with different bracing qualities, and there are also different fixing systems to address different bracing scenarios. It is unknown what Gib products were used in the repairs, or how the linings have been fixed, an important issue for compliance with a bracing schedule. It cannot be concluded that Falcon replaced Gib systems in a like for like manner. Some linings will need to be removed and re-fixed based on an updated bracing schedule.

[179] As discussed above the house was originally designed with a mixture of lightweight cladding, and brickwork, but the lightweight plaster over polystyrene was changed to medium weight stucco. The bracing calculations were made prior to the change in cladding type and do not appear to have been updated. However, this issue should not be over-stated as much of the house: most south facing aspects, most of the east block, the northern section of the central block, and the low wall of the conservatory, are wholly or partially brick clad. Brick is a heavy-weight cladding. I also note that the house withstood the shaking from the Darfield earthquake with minimal damage, leading me to conclude that the bracing was adequate for the bracing demands of that event. However, it is unclear whether it meets the 'as when new' and Code requirements and must be assessed and remediated, as above.

[180] As noted above the gables in the east block are out of vertical by 25mm. The gables will be straightened and returned to vertical. This will require the removal and replacement of the tongue and groove matai lining the kitchen's chapel ceiling.

#### **Internal finishing;**

[181] As originally pleaded Mr and Mrs E argued that the paint and plaster finishing of the internal linings was defective. However, during the hearing it eventuated that most rooms had cracking caused by the 14 March 2016 Kaikoura earthquake. Mr and Mrs E had this damage repaired and EQC reimbursed the costs. This means that the issues with the finishing are not IAG's to address. However, as discussed above, some linings will need to be replaced as part of the bracing repairs.

#### **The downstairs bathroom;**

[182] It was claimed that the downstairs bathroom, which was retiled, requiring the replacement of the waterproof membrane, was non-compliant. This was because it was unclear whether the work was subject to the exemption in Clause 1, as it involved sanitary work, and as a leak through the membrane would cause rot and, therefore, could create a health and safety issue. Therefore, it was argued that a consent should have been obtained before the repairs were carried out.

[183] The building survey experts considered this issue. The majority of experts, but for Mr Tolley and Mr Pickering concluded that the work fell within an exemption by a fine degree. This is largely because the area is concrete floored and the risk of structural failure from leaks is less, than if timber flooring is used. Considering their opinions, I conclude that the bathroom does not require remediation. There is no evidence of defects and in the 2016 earthquake there was only a small amount of ceiling cracking in the bathroom.

[184] It has been claimed that the drainage has been affected and not remediated. This will require the removal and replacement of tiling on the ground floor. However, no evidence of drainage issues was put before me. I cannot make a finding without evidence.

## REMEDY

### What remedies are available?

[185] It is clear from my findings above that IAG are liable for the costs of remediating the defective repairs and un-scoped damage. However, the question is whether this is to be calculated based on IAG making progress payments as the work is completed, or whether the law allows for the entire estimated cost to repair being paid up front as damages.

[186] The policy is a contract, under the 'to pay' policy wording the agreement between the parties is that IAG pays for remedial work as it is done. Any remedy ordered under the policy contract must follow the terms of that agreement. However, if the contract was breached, as Mr Johnstone argues, then the up-front payment of the estimated repair costs as compensatory damages is available.<sup>62</sup> This is because damages are an extra-contractual remedy. In this case there are further considerations, I have found that, unlike in *Sleight*, the Contract did not contain an indemnity clause which shields IAG from claims of negligence or estoppel by Mr and Mrs E.

[187] As was observed by Gendall J in *Sleight* it was foreseeable that IAG's and Hawkins' failures to adequately project manage the repair work would cause or contribute to the losses Mr and Mrs E have suffered. In short, the remedies to make good negligence are also available to Mr and Mrs E. Damages for losses under negligence are calculated on the cost to return the plaintiff to the state they were in but for the negligence.<sup>63</sup> This includes adjustment for betterment. In the current circumstances the policy pays on an 'as when new' basis, so the higher policy standard is what I base my calculations on. The question is whether the duties assumed by IAG to manage the work were breached, and if there was a breach was the loss which followed foreseeable?

[188] In *Sleight* Gendall J found:

In my view, the Sleights were closely and proximately affected by IAG's conduct under its Managed Repair Programme in arranging what was significantly defective repair work to their home. Further, it was clearly foreseeable that the Sleights would suffer loss if the reinstatement work was carried out negligently, which is the case here. IAG,

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<sup>62</sup> See P Blanchard (Consulting ed) *Civil Remedies in New Zealand* (2<sup>nd</sup> ed, Brookers, Wellington, 2011) at 1.3.1.

<sup>63</sup> At 2.2.1.



in owing a duty to exercise reasonable care and skill in relation to the repair work being arranged and managed under its Managed Repair Programme, breached that duty.<sup>64</sup>

[189] As in the current case I have found that the same failures to project manage under the Programme have caused Mr and Mrs E s' losses, I adopt the finding of breach of duty both in negligence and as a breach IAG's CGA duties.

[190] Mr Cuff argued that the 'to pay' policy as interpreted in *Sleight* creates a situation where the policy cannot be breached until and unless an invoice or progress payment claim is tendered by the claimant and refused by IAG. This means, on his interpretation, that the compensatory damages sought by Mr and Mrs E are not available. Payment is contingent on the liability for remediation work first being incurred. Mr Cuff argues that this position is derived from the analysis in *Sleight*.

[191] I do not agree that this is the only breach possible under the policy. The argument that the policy is not breached until a claim for payment of repair costs is refused takes an overly narrow view of what an insurance claim is. A claim under a policy, even a 'to pay' policy, is more than a specific request for re-imbursement of incurred repair costs. It is a call for indemnity under the terms of the policy and engages obligations, imposed by the policy, on both insurer and insured. These include reciprocal duties of utmost good faith, reciprocal duties to provide information, duties to assess the claim in a timely fashion, and others.<sup>65</sup>

[192] An insurance policy has a promise of indemnity at its heart, a promise to make good a loss under the terms of the policy. The 'to pay' clause is simply a mechanism within the policy by which the indemnity is delivered. It does not and cannot change the essential character of the policy as a contract of indemnity. A contract is breached when an obligation promised by the contract is not delivered. In this case IAG promised that when the house was damaged it would pay the cost of repairing the home to an 'as when new' condition. The repairs did not fulfil this promise. When the repairs were completed, without fulfilling that promise, IAG was in breach. As with *Sleight*, the issues are not the minor issues on a snag list but are fundamental and significant.

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<sup>64</sup> *Sleight v Beckia Holdings & Ors*, above n 1, at [316].

<sup>65</sup> *Young v Tower Insurance Limited* [2016] NZHC 2956.

[193] In *LS v Medical Insurance Society*, I recognised that insurers have a duty to accurately assess claims, and communicate the details to the insured, so the insured can make the choices the policy requires of them in any informed manner.<sup>66</sup> A failure to properly assess damage goes to the heart of the promise to pay to remediate. If the assessment does not capture the damage, the insured cannot properly exercise its discretion to remediate or accept a cash settlement on an indemnity basis. The policy wording reflects this obligation: “...we’ll ... give you all the information you need on how we’ll settle your claim.” IAG’s failure to accurately assess the damage breached this duty.

[194] Moreover, in *Sleight* Gendall J awarded damages based on the estimated costs of repair, which are what Mr and Mrs E seek in this instance. Whether these are under the breach of CGA or breach of a policy condition the calculation is the same. The CGA breach was not pleaded before me, however, I am not bound by pleadings. Having adopted the findings of a breach of the CGA from *Sleight* and having found that IAG breached its policy obligations to pay for repairs which returned the house to an ‘as when new’ state and to accurately assess damage, I find that compensatory damages, as sought by Mr and Mrs E are available.

### **General damages**

[195] Mr and Mrs E have claimed general damage of \$25,000. This is sought for:

- (a) the physical inconvenience and discomfort of living in a house with defects from December 2013 to 2018, when they moved out;
- (b) the distress and mental anguish caused by the loss of amenity and function of living in a defective home;
- (c) the stress pain, suffering and mental distress of dealing with IAG which refused to engage in rectifying defective repairs; and
- (d) the inconvenience and time spent arranging investigations dealing with IAG and the litigation process.

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<sup>66</sup> *LS v Medical Insurance Society*, above n 53, at [34].

[196] General damage is the award of money for non-monetary losses which cannot be calculated. Pain and distress are harms which if proven deserve some form of recompense, but which are impossible to objectively value. If a breach can be shown the suffering and distress which flows from the breach may justify an award of general damage. The guidance on the amount ordered comes from previous cases where analogies can be drawn.

[197] Mr Johnstone has argued that the repair process itself caused mental harm to Mr and Mrs E, and that IAG failed in its duties of utmost good faith after being notified of the defective repairs from mid-2018.

[198] Mr Cuff cites a line of cases which hold that general damages are not available for breach of contract, unless the contract is one intended to provide pleasure or enjoyment or the relief of suffering.<sup>67</sup> On his argument the policy is only a promise 'to pay' for repair should the insured elect to repair, therefore general damages are not available. I reject these arguments. A homeowner's insurance policy is not a commercial contract. On one side of the bargain is a consumer, insuring their home. The psychological importance of a secure home is clear. The trauma of living in damaged homes post the CES has been referred to by virtually every applicant in this Tribunal. The argument that the promise to repair a person's home is not a promise of relief from suffering is intellectually and emotionally arid. As I found above the depiction of the policy as simply a promise 'to pay' is overly narrow and an incomplete view.

[199] I have found breaches in contract, negligence and under the CGA. Therefore, general damages if proven are available. I note that the High Court Earthquake List cases show that there is a high bar for general damages in these cases. Much of the distress has been caused by the passage of time in assessment, repairs and settling claims. The delays are often not within the control of the insurer, given the EQC double insurance system which requires EQC to declare the claim over cap before the insurer can begin their process. As has been commented on in this decision, the scale of the CES events placed severe strains on insurance and construction capabilities, strains which caused shortages, which in turn took years to be resolved.

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<sup>67</sup> See *Addis v Gramophone Co Ltd* [1909] AC 488.

[200] In this case the defects are not such that there is a direct analogy with the leaky home cases where plaintiffs are living in homes which put their health at risk.<sup>68</sup> In this case the worst water damage pre-dated the earthquakes. Before mid-2018 it was not known that the repairs were defective, so the mental anguish caused by the defective repairs did not occur prior. I acknowledge that the repair process was fraught, however, despite its failure to project manage, IAG did act to deal with the issues with Falcon in a reasonably timely fashion. Mrs E in fact gave her thanks to Mr Groufsky and Mr Clapp for their assistance.

[201] While I acknowledge that during the period after the damage was discovered, IAG's refusal to accept liability was distressing, I note that Mr and Mrs E were no longer living in the home during this period and IAG's position; that it was not liable for defective repairs under the Programme, while later proved incorrect, was at least legally arguable. I do not see that IAG's conduct meets the threshold where it can be said to have breached a recognised duty of good faith. As a result, I find that the threshold for an award of general damages has not been met.

## QUANTUM

[202] I began quantifying the cost of remediation, however, it has become apparent that the current inflationary forces operating in the construction sector mean that the five months which have passed since I heard evidence on the estimated costs and rates makes much of this evidence unreliable. It is also clear to me that the findings that IAG bears no liability for the downstairs bathroom, kitchen columns and flat roofed areas has a flow on effect on pricing and margins, which is difficult or impossible for me to quantify based on the evidence available. However, there are disputed issues with measurements, remediation strategies, and methodologies which I can resolve and do so below. I have worked from Mr Whyte's scope and estimated cost, as it is the most complete. In the section below I identify areas which require adjustment, and areas where the Whyte Construction scope (the scope) was challenged by Ms van Eeden or Mr Creighton. For clarity; my comments below are not a comprehensive list of the remediation works but are adjustments to the scope necessary based on my findings above.

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<sup>68</sup> See *North Shore City Council v Body Corporate 189855 [Byron Avenue]* [2010] NZCA 235.

[203] As a general observation, I have found that the house is an architecturally designed building which was of a high quality. Therefore, finishes and detailing need to be of a similar high quality to meet the 'as when new' standard. For such a property costs, such as architect's fees and supervision, are appropriate whereas for a simpler, less design heavy dwelling those costs would not be justified.

### **Tiled roofing**

[204] The roof will require an extension of framing on the central block to account for the increased depth of the new cladding and over-clad areas. This is part of Mr Whyte's costed scope. The other areas to be reclad are on gable ends, or adjacent to flat roofed areas where the detailed plan is to remove or alter the profile of parapet walls. The gable end detailing does not include frame extension, and the flat roofed areas were not damaged, therefore, any changes that involve costs; IAG is not liable for. However, protection costs for the butynol clad roofing needs to be added.

[205] There was discussion about the need for plastic building shrink wrap to protect the dwelling with the roof and cladding removed. Mr Whyte has allowed for this cost and says that is a requirement of Contract Works insurers. It was argued that for the roof alone this was not necessary. However, I have found that all brickwork and much of the stucco must be replaced, and other areas of stucco will require over-rendering. Given the extent of the work required, building wrap is reasonably necessary, and it is required by the Contract Works insurer (also IAG) which further persuades me it is a prudent measure.

[206] There was some dispute over the measures for the roof tiling. Mr Whyte based his initial price calculated on 353m<sup>2</sup> of roof tiles. Ms van Eeden measured the roof area at 256m<sup>2</sup> and adjusted her pricing accordingly, including challenges to the measures of hip and ridge flashings, the demolition costs for the roofing, underlay and other materials. The later price put forward in the final costing at the hearing was from a quote from Mr Mangos of O'Donnell Roof and Tile. Mr Whyte advises that Mr Mangos made a site visit while Mr Creighton was also on site. Mr Mangos had copies of the original Architect's drawings as well as those prepared for the remediation. Mr Creighton adopted the O'Donnell Roof and Tile quote in his estimate. Mr Whyte advised that the complexity of the house meant that a square meterage approach is unsuitable. The complexities of the roof are plain to see. This

will increase the wastage due to the need to cut tiles and flashings to suit angles, skylights and the like. I accept the O'Donnell Roof and Tile quote. As a general observation, if a specialist supplier/installer is provided with relevant information, their quote will generally be preferable to an estimate from a quantity surveyor. A quantity surveyor works from averaged conditions which may not capture the working complexities of a more complicated project.

[207] Mr Whyte's costing contains allowances for spouting and guttering relating to the flat-roofed areas. Where these are necessary due to the stucco work, these should be included, but where they relate to the flat roofed areas, or the kitchen columns, the allowance will need to be removed.

### **East retaining wall**

[208] It was agreed that the east retaining wall needs to be rebuilt. Mr Creighton's estimate is \$30,214.00 (gst excl) whereas Mr Whyte's estimate is \$44,040.99 (gst excl). In evidence it became clear that the difference related to methodology, measurements and a design difference.

[209] The methodology and design difference related to the size of the earthmoving equipment required to demolish the existing wall, and the steps required to allow that equipment access. The wall sits at the bottom of the site, and access is not possible from below or the sides due to the terrain and neighbour's preferences. Mr Creighton's methodology involved a smaller 2.5 tonne digger being 'walked' around the eastern end of the site, although he also mentioned the use of a 7 tonne machine in evidence (which would require crange). Whereas Mr Whyte has allowed for a mobile crane to be on site to lift a 6-8 tonne digger to the bottom of the section. The larger machine is required to pull out the existing retain poles whereas Mr Creighton's methodology involves cutting the poles at ground level and leaving the bases in situ. However, the larger machine is too large to fit around the sides of the house.

[210] I note that the replacement of the original retaining wall involved the removal of the posts. The Miyamoto design which has been agreed as the solution involves posts being placed down to 2.5m below ground and embedded in concrete. Not removing the piles will complicate the placement of the new piles. I find that Mr Whyte's method is to be preferred. However, the crane rate is for 2 days: one day to drop the digger in and remove debris from the demolished wall and another day to remove the digger and spoil. However, the plan involves the re-use of

fill and gravel, therefore a full second day to remove the machinery appears unnecessary. Accordingly, I make an allowance of 1.5 days crane hire.

### **Brick veneer cladding**

[211] I have found that all the brickwork requires replacement. There are differences between the parties about the quantities of brick's required, and likely wastage. Mr Whyte's scope is based on 264m<sup>2</sup> of brick cladding, 42 lineal metres of brick sills and 19m<sup>2</sup> for the front entrance feature arch. Ms van Eeden re-measured and calculated the coverage 203m<sup>2</sup>, 31m, and 18m<sup>2</sup>. Mr Creighton's measure was 38 lineal metres of sills. In response Mr Whyte has defended his measures, which are taken from the original construction drawings and Mr Pickering's measurements. He also points out that a 10% allowance for cuts, damaged or chipped bricks is normal, and in this instance, there are a number of complex features which increase this rate. He also points out that the bricks are sourced from Australia and an under order will result in an expensive delay.

[212] By my calculations the measure difference is 24%, an excessive allowance for cuts, chipping and breakage. However, Ms van Eeden's measurements do not make allowance for 28.10m<sup>2</sup> of brick paving. This reduces the difference to 12%, which is a reasonable allowance. On this basis I find Mr Whyte's brick quantities to be reasonable. However, the quantities for demolition (which need include no wastage allowance) will need to be re-visited.

### **Window and door joinery**

[213] Where windows or doors are in stucco clad areas which require over-rendering, or re-cladding, the additional cladding thickness necessitates new joinery units. However, the windows in brick-clad areas do not require replacement. It appears by the quantities listed that Mr Whyte's costing includes all window and door joinery, and this will require adjustment.

[214] Those windows that require replacement need a strip of Gib linings to be removed, which is allowed for but must be adjusted to allow for those windows not being replaced. In the en-suite the wall tiling will need replacement to allow for the replacement of the windows. The allowances for internal painting of window reveals will also need to be reduced for those window reveals which are not being replaced. As not all windows are being replaced, an

allowance must be made for those windows in the brick clad areas to check that head, sill and jamb flashings are correctly in place.

[215] The scope includes provision of trellis fence panels. Ms van Eeden believes these are un-necessary. It is unclear why the existing panels cannot be re-used. This rate will need to be recalculate based on re-use.

### **Stucco cladding;**

[216] The variations to the scope indicated by my findings on the areas of stucco which need replacement, or repair mean that Mr Whyte's pricing will need to be revisited as the demolition costs, access and timeframes will all be affected by my findings. The kitchen columns are outside of the scope and all work relating to these features will need to be removed from the scope.

[217] It was agreed by Mr Creighton and Mr Whyte that areas where the stucco was either replaced or over-rendered, the fascia and spouting would need to be removed and refitted as otherwise they would become buried in new plaster.

### **Structural elements**

[218] A bracing schedule will be required and those areas of lining which require replacement with braceline or special fixings will need to be identified and the costs of any bracing schedule compliant relining will need to be calculated as a provisional sum.

[219] Mr Whyte's scope includes an allowance for 381 lineal metres of framesaver, a timber preservative applied to framing which has, or may have been exposed to moisture. The replacement brickwork lacked features to lessen the rate of wetting which increased the risk of water damage by lessening the drying rate of the brickwork. I have found that the stucco was cracked and open to water ingress for at least six of the ten years since 2011. Mr Tolley found high moisture readings in various area. Given these facts, framesaver is a reasonable inclusion. However, Ms van Eeden has challenged the measure and believes it is overstated by 61m, and the kitchen columns will need to be removed.



[220] Mr Whyte's costing includes various allowances for straightening framing. Beyond the kitchen gable ends which need to be returned to vertical, there is no evidence that any frame straightening is required.

[221] The reduced amounts of re-lining and the removal of framing work means that the provisional sums for electrical fittings and re-wiring will need to be reduced or removed.

### **Internal items**

[222] Gib linings are discussed above at [218]. In the kitchen the tongue & groove chapel ceiling linings must be removed to allow for the gable ends to be straightened. My Whyte has specified the replacement timber as 19mm rimu, whereas Mr Creighton has specified 12mm rimu. It is not clear what thickness either the original tawa tongue & groove or the replacement rimu were. I find that 12 mm will suffice for what is a non-load bearing application requiring an adjustment of the scope.

[223] The scope makes allowance for replacing floor tiling in all areas and the parquet flooring. There are no signs that the existing flooring which was replaced when the repairs were carried out or is defective, and the works I have found are required do not necessitate its replacement. These items must be removed from the scope as will the grinding of the slab and the replacement of floor wastes, work not needed if floor tiling is left untouched. However, there will need to be an increased provisional sum for protection of floor coverings as a result.

[224] As Gib linings are not fully replaced there are other adjustments such as the need to remove the internal heat pump, and the gas fire, which will need to be re-visited as they may now no-longer be required.

### **The downstairs bathroom.**

[225] The downstairs bathroom was re-lined and shows no signs of defective works. It is a tiled wet room. It has been pleaded that because no consent was sought and due to the impossibility of confirming what membrane was used, the bathroom should be retiled and relined. However, I have found this is not justified. The bathroom work must be removed from the scope.

## Other matters

[226] Mr Whyte includes the following items which require comment:

- (a) The demolition and preliminary and general costs will require adjustment.
- (b) There is provision for a new upstand at the balcony door of the study. There is no damage or defective repairs to this area, and it should be removed from the scope.
- (c) There is provision for underground electrical services, however, it does not appear that any are implicated in the necessary reinstatement work. These should be removed. This should stay in the scope.
- (d) Professional fees have been included twice, and one instance will be removed.
- (e) Ms van Eeden challenges the need to re-cast the concrete steps at the west of the section. However, lowering paving in this area will require these to be lowered as well.
- (f) There is provision for an asbestos survey. While asbestos can be present in pre-2000 buildings, it has not been used in New Zealand manufactured building materials since 1984. The home is a residential building constructed in 1998-99. It is unlikely that any asbestos will be present. This should be removed from the scope.
- (g) There is a disagreement over whether form work for concrete drainage channels is necessitated. I do not have evidence as to where these channels are. Therefore, the experts will need to re-visit the issue and provide detail if no agreement can be reached.
- (h) Ms van Eeden has challenged rates and measures for; lowering gravel ground clearances, the m<sup>2</sup> of the asphalt replacement on the driveway. The rates and measures will need to be recalculated by Mr Whyte to ensure accuracy.

## **Contingency**

[227] At the time of the hearing evidence was heard suggesting that two contingencies were appropriate, 3% for the increase between the date of the scope and the start of construction, and a further 8% on materials, to allow for the risk of forecast inflation in the cost of building materials. An estimate of additional costs for an eight week delay due to covid issues was also included. Since the hearing the covid traffic light framework has been announced, and it is likely that Christchurch will be at orange or green settings to be in place at the time the work is under way. Under the traffic light framework fully vaccinated tradespeople will not be prevented from working on construction sites. I cannot see that the covid contingency is now justified.

[228] The other contingencies will need to be revisited to account for the developments in the costs and availability of building materials since the hearing.

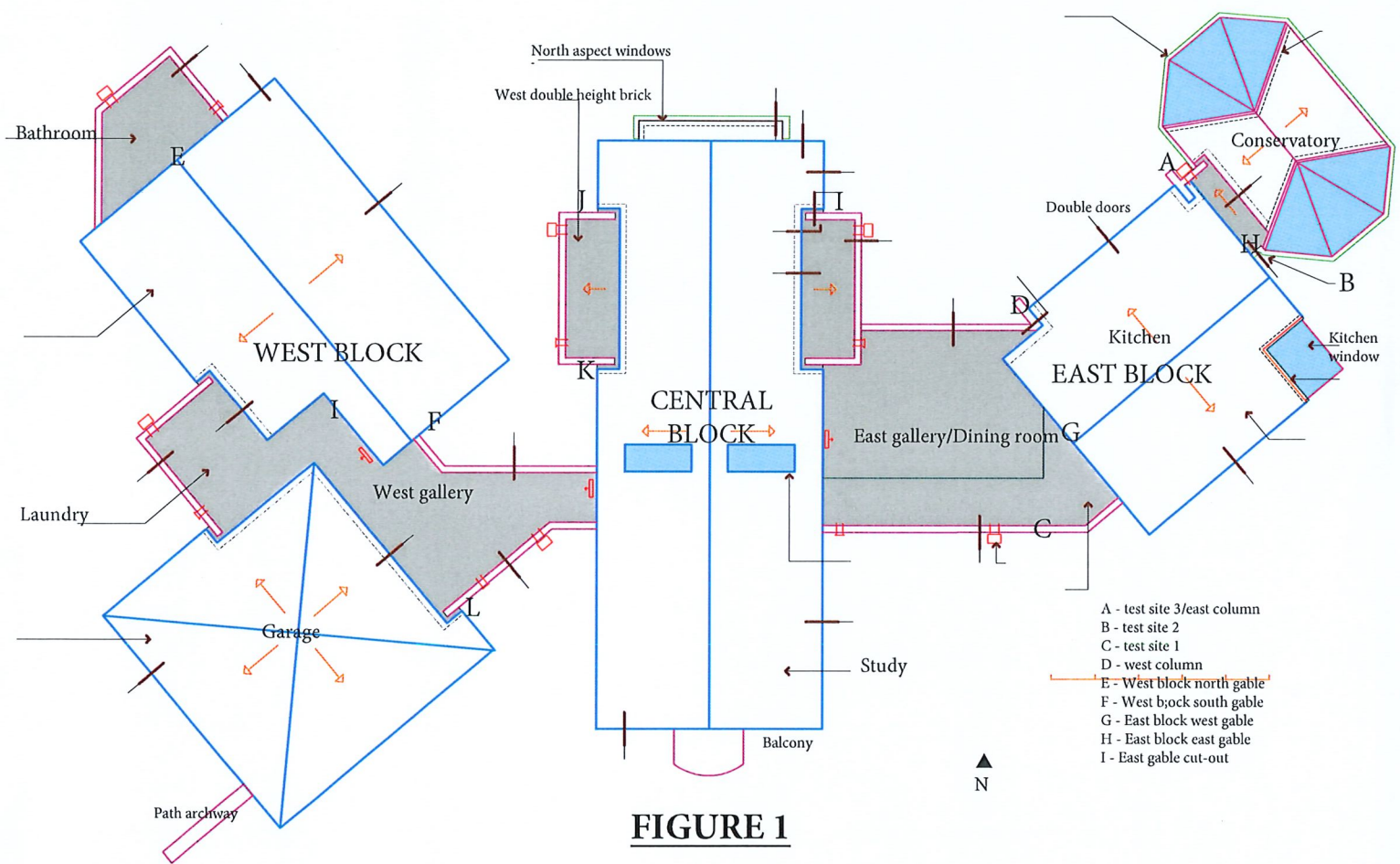
## **OUTCOME**

[229] The scope needs to be revisited based on my findings. Mr Whyte is to revise his scope to be circulated by Ms van Eeden for comment and his subsequent response. Any areas which cannot be agreed are to be submitted to me and I will make final rulings accordingly.

C D Boys

Chair

Canterbury Earthquakes Insurance Tribunal



**FIGURE 1**