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NL: NS040611

11 June 2004

Tony Hinton
Productivity Commission
PO Box 80
Belconnen ACT 2616

Dear Tony

Reform of Building Regulation

I refer to our meeting on Thursday 22nd of April, where I gave you a verbal submission in respect of the above, and take up your offer of an extension of time in which to make this written submission as Registrar of the Builders' Registration Board (the Board) and the Building Disputes Tribunal (the Tribunal).

The Board deals with the licensing of builders and takes disciplinary action against builders who offend against the *Home Building Contracts Act 1994* and the *Builders' Registration Act 1939*. The Tribunal is a quasi-judicial authority that determines contractual residential building disputes from \$6 000 to \$200 000, and any workmanship disputes between the builder and their clients regardless of value.

With respect to your study and the Building Code of Australia (the BCA) I offer the following comments.

Non-compliance

It is the experience of those who work at the Board and the Tribunal that many builders have little understanding of the BCA and its application, leading to non-compliance causing serious consequences.

For example, in a recent proceeding before the Board, a builder's lawyer noted that despite having 30 years experience as a registered builder and holding a first-class reputation, his client had little or no knowledge of the BCA requirements. The builder also had no idea whose responsibility it was to determine the wind loading requirements. The amalgamation of errors led to a tragic death.

I believe that the contributing factors of non-compliance are as a result of a number of reasons.

Awareness

I do not believe that the Australian Building Codes Board (the ABCB) has met its objective of increasing community awareness of the BCA.

It is my experience that many builders will tend to do what they or their fathers/peers as mentors have always done, that consumers are unaware of the BCA, and this trend will be difficult to break unless extensive training and training initiatives with respect to the BCA are put in place.

Education is a key to compliance. To increase consumer and building industry awareness of the BCA, a sound education program to ensure a better understanding of BCA provisions should be developed by the ABCB and industry as a matter of priority. Education programs must promote the regular use of the latest BCA by the building industry, and create general awareness for consumers.

Understanding

The BCA is not designed for builders to understand but rather comprises a legal document that is subject to substantial interpretation and guesswork. Whilst it is a good reference tool for engineers, architects and legal practitioners, it is not understood by builders.

In particular, from the perspective of both builders and owners, the use and application of the deemed to satisfy provisions and the alternative solutions need to be clarified and simplified (refer to Building Disputes Tribunal Reasons for Decision – Davies v Ors).

The BCA should be reviewed and written in a manner that can be easily understood by builders and building industry practitioners alike.

Access

Ideally, every registered builder should possess the latest, updated version of the BCA. However, it is apparent that not many builders possess current copies of the BCA and, given that it is regularly amended/updated, any working knowledge that builders may have of it can rapidly become superseded. I believe that the cost of the BCA is a contributing factor to non-compliance and the appropriateness of the current pricing structure should be reviewed.

In view of the BCA being an obligatory legislative document, it could be argued that it should be made available via electronic access free of charge like all other legislation. Of course, hardcopy versions would be subject to some cost.

I understand that much funding for the ABCB is raised through the sale of the BCA and that therefore there may be some reluctance to reduce the price to users. Perhaps this funding mechanism could be reviewed as it would not appear to be acting as an incentive to reduce costs.

In any case, it would be useful if it could be established whether there is a more economic way of producing the BCA and disseminating it to registered builders across Australia.

Uniformity

One objective of the BCA is to bring uniformity across Australia with respect to building processes and practices. In my view, this objective is not being met. Set out below is an extract from a high-profile West Australian engineer who represents many builders.

"The BCA does specify for a damp proof course to be placed to the external brickwork. However it is to be noted that the BCA in this regard is a deemed to comply document and non-compliance does not imply non acceptance.

It is an almost universal practice that a damp proof course is not placed to the external brickwork.

The reason the damp proof coursing is not needed to external brickwork is due to the free draining sand foundation in which construction occurs over the vast majority of Perth.

The lack of placement of a damp proof course is a practice which has occurred over many years, in hundreds of thousands of houses, without ever having been demonstrated the problem has occurred because of it. When a sand finished render is placed to the exterior, as is the case on this site, it is possible that the render itself is providing the wick to the rising moisture and not the underlying brickwork".

Whilst I do not agree with the engineer's interpretation, I wonder why nationally approved standards are put in place when it appears that in Western Australia damp proof courses aren't installed. How does a nationally approved deemed to satisfy provision receive such status when it is argued that the majority of homes do not require it?

Enforcement

There seems to be no effective enforcement of the requirements of the BCA.

Disputes

Disputes before the Tribunal are often defended on differing and the wildest interpretations. If a builder has built under the deemed to satisfy provisions and substitutes this for an alternative method, no application is usually made to the client or the local government. Disputes arising on this basis are usually defended by bringing forth a current engineers certificate.

Productivity

It would appear that there is little capability within the Western Australian building industry to address booms and busts. Due to the competitiveness of the major project builders, price increases are sought as a last resort instead of being applied at the beginning of boom periods.

Building contracts in Western Australia valued between \$6 000 and \$200 000 are required by law to be fixed price (exemptions apply) and many builders do not take potential

price increases into account during boom periods. When subcontractors and material suppliers subsequently increase their prices, it leaves lesser well-managed building companies exposed, who then become perfect candidates for failure from insolvency.

Similarly, many builders do not take into account material and trade shortages, leading to long delays and additional costs to consumers, which subsequently result in claims for damages.

Housing indemnity insurance

Housing indemnity insurance has had a major impact on the building industry, as insurers can exclude builders from the industry without having to provide a reason. All forms of government must justify refusal of market entry in writing as well as providing a person with some avenue of review or appeal. The commercial insurance industry is not subject to these concepts and insurers do not have to apply a public interest test when builders are rejected, claims are refused, or premiums are loaded.

A common complaint in Western Australia is that insurers are placing too many restrictions on builders' turnover, thereby impeding the natural growth of the company. This has the potential to create an anti-competitive market for builders.

Owner-builders also seem to be losing out in matters of productivity, paying a premium in home indemnity insurance due to their status. The risk to insurers is the event of the death, disappearance or insolvency of the owner-builder, and the owner-builder, usually being a one-off occurrence, must incur some loading. However, the risk is usually less than that of a registered builder as the owner-builder is only required to take out a policy if selling within seven years for the balance of seven years. In our experience, the majority of policies are for three years with premiums ranging from \$2 000 to \$6 000. In contrast, the premium to registered builders commences at about \$1000.

Thank you for the opportunity to make a written submission.

Yours sincerely

Nigel Lilley
REGISTRAR

JURISDICTION	BUILDING DISPUTES TRIBUNAL	
CORAM	MR D FORRESTER MS G KEATING MR G PRUNSTER	- Deputy Chairperson - Member - Member
HEARD	8, 9, 10 March 2004 22 April 2004	
ORDERS ISSUED AND REASONS FOR DECISION PUBLISHED	17 MAY 2004	
COMPLAINT Nos	O.4474 and O.4475	
BETWEEN	MR & MRS M DAVIES and MR S MADDAFARI and SCANDIA PTY LTD	Complainants First Respondent Second Respondent
CATCHWORDS	House construction – application of Australian Building codes – effect of sale of unfinished building to the Complainants as second owner - conflicting evidence of engineers – consideration of reports of experts without appearance of authors – requirements of Local authority –.	
REPRESENTATION COMPLAINANTS	Mr and Mrs Davies	
FIRST RESPONDENT	Mr S Maddafari, Ms D Binning	
SECOND RESPONDENT	Mr and Mrs R Whitten	
CASES REFERRED TO IN THE DECISION	Foster v A T Brine & Sons Pty Ltd (1972) WAR 157 @ 162 Brooking on Building Contracts 4 th Edition page 52 Radisson v Jankovic (1987) VR255 Voumard – The Sale of Land 5 th Edition – paras 7110 and 7150 Evidence Act 1906 – Section 79C	

REASONS FOR DECISION -DRAFT

1.0 BACKGROUND

- 1.1 Between March 1998 and approximately early November 1998 the First Respondent (referred to as the Owner-Builder) contracted with the Second Respondent (referred to as the Builder) to construct a house at Denmark. The initial arrangement was that the builder would construct to lock-up stage for a value of \$62,000 and the Owner-Builder would then complete the house for a value on the licence of \$65,000. This arrangement was approved by the Denmark Shire Council, who issued two building licences, number 3889 dated 6 March 1998 to the Builder operating under the then business name of Classique Pole Homes and number 3890 also dated 6 March 1998 to the Owner-Builder. This unusual arrangement confused the Complainants after they had bought the house from the Owner-Builder. However nothing comes of it for our purposes as the arrangements were accepted by the local authority. Whether or not this satisfied the requirements of the Builders' Registration Act is outside our jurisdiction.
- 1.2 After completion of the main building on 10 July 1998 the Owner-Builder carried out most of the internal finishing as well as a wooden decking at the front and an upper storey balcony at the rear. However some aspects were left incomplete when he sold the house to the Complainants in October 2001 for \$165,000, subject to his being allowed to remain in the house as a tenant until 25 July 2002. At the completion of the lease the Complainants took over the property in August 2002. At this point it is alleged they discovered cracking in the walls, particularly at the rear of the house together with a large number of items which it was alleged indicated a poor standard of workmanship or as being incomplete. These items as heard by the Tribunal were listed in a report by an inspector of the Builders' Registration Board and these are considered later.

2.0 PRELIMINARY ISSUES

Before examining the claims several preliminary issues have to be considered. These are:

2.1 Application of Building Code and Standards

- 2.1.1 An increasing number of Complainants before this Tribunal are relying upon the Australian Standards which are now included under the Building Code. Most local authorities have adopted them as part of their standards of building practice to be followed in the cities and shires. But the assertion – heavily emphasised by the Complainants in this action – that the actual requirements are law and have to be followed exactly is, in fact, a misunderstanding of their effect.
- 2.1.2 As to the compliance with the Code this has not been explicitly included in Section 12A of the Builders' Registration Act, in the same form as in the Eastern States. In Victoria S.8(c) of the Domestic Building Contracts Act 1995 "there is an implied warranty in every domestic building contract by the builder that the work under the contract will be carried out in accordance with, and will comply with, all laws and legal requirements including those under the Building Act 1993 (Vic)" (see Brooking on Building Contracts 4th Edition, page 52). The same applies in other Eastern States.

In Western Australia the position is influenced by the case of *Foster v A T Brine & Sons Pty Ltd* (1972) WAR 157 @ 162 where it was held that a contract for the erection of scaffolding contained an implied term that the work would be done in a proper and workmanlike manner and in compliance with the demands of the positive law such as the requirements of building regulations.

As the Building Code has been adopted in WA by local authorities and specifically so by the Government in relation to the Building Regulations 1989, there can be no doubt that the Code would come within the concept of the wording of Section 12A of the Builders' Registration Act, where it refers to "in a proper and workmanlike manner." Included in such a meaning would be relevant By-Laws of the local authorities. It is in the application of the Code that Owners have not appreciated the intentions of that Code or of the many Standards now available and adopted by the Code.

- 2.1.3 The Application (Part AO) to the Introduction to the Building Code or BCA as it is referred to describes a BCA hierarchy. There are four main parts. They are:

Objectives;
Functional Statements;
Performance Requirements; and
Building Solutions comprising;
- Deemed-to-Satisfy Provisions, and
- Alternative Solutions

The critical factor is Performance Requirements which "outline the levels of accomplishment which different buildings must attain The Performance Requirements are the only BCA hierarchy levels where compliance is compulsory under building control legislation" (see AO.5 Introduction). Owners tend to confuse these requirements with the methods described in the standards as meaning that the methods are obligatory. That is not so.

- 2.1.4 Paragraph AO.5 goes on to say "the means by which a building proponent complies with the BCA Performance Requirements is known as a Building Solution." As noted above, that Solution includes Deemed-to-Satisfy Provisions and Alternative Solutions. "Deemed-to-Satisfy Provisions make up the bulk of the BCA." Hence in any Standard where there are details given of the size of a beam or the depth of a footing then that is a Deemed-to-Satisfy Provision.

Paragraph AO.8 states "A Building proponent may decide to meet the Performance Requirements via a route which is not included in a Deemed-to-Satisfy Provision. This is referred to as an Alternative Solution When using an Alternative Solution it is important to ensure that it complies with all parts of the BCA as required by AO.10."

Paragraph AO.9 refers to Assessment Methods and says they "are the means by which a building proponent proves that an application for a building permit meets all requirements." Assessment methods include the requirements under the BCA but also refer to "a Verification Method which is not listed in the BCA and might include:

- calculations using analytical methods or mathematical models;

- tests using a technical procedure, either on site or in a laboratory to directly measure the extent Performance Requirements are achieved; or
- any other method, including an inspection (and inspection report)."

Further on there is a reference to local authorities who, when determining that all requirements have been met, "might check to see that a qualified expert has offered an opinion and most importantly, found the application to comply with the BCA." The words "to the degree necessary" also appear. Clause AO.9 says "This phrase is used to show that provisions can differ according to various elements which appropriate authorities may take into consideration when assessing building applications."

2.1.5 Finally the following words appear at the bottom of page 22 "So, there are different ways of satisfying BCA requirements," In effect where there are difficult sites or design changes or apparent deviations from the requirements either of a Standard or a By-Law, then the local authorities are increasingly asking for an engineer to provide a report that the building is structurally sound, or is technically stable for the future. While these demands have not yet stipulated that the Performance Requirements have been met, this is in fact the standard which applies in all claims brought before the Tribunal. The proof of that compliance is effected by a report of a qualified engineer. There are other minor references but the above essentially covers the requirements of the Code.

2.1.6 The Code itself includes a host of various Standards which have been drawn up over the last decade. The Standard most often referred to in matters before the Tribunal is AS2870-1996 pertaining to concrete slabs but which was primarily drawn up to deal with the presence of clay on building sites. Most importantly there are two very relevant clauses which are overlooked by owners and their advisers. These are –

- (a) In the main document at 1.1 Scope, this wording occurs - "This Standard shall not be interpreted so as to prevent the use of materials or methods of design not referred to herein. Specifically this Standard shall not be used to prevent the use of locally proven designs, or alternative designs in accordance with engineering principles."
- (b) In the 1996 Supplement at C4.1 General are these words "The Standard allows the modification by engineering principles of the standard designs given in Section 3 It is also possible for an engineer to select a standard design without modification If a footing system is designed by a qualified engineer, that design need not follow any of the structural proportions set out for the standard designs."

In consequence where an Owner alleges that structural plans have not been followed, or the necessary footings have not been installed, or the roof does not accord with wind velocities for the area, etc. then it would be expected that an engineer's report would be required. However in the end result, the report of the Builder's engineer that the Alternative Solution does meet the required Performance Standards would have to be followed by the Tribunal, UNLESS the engineer for the Owner can clearly demonstrate that there are flaws in the facts relied upon, or in the reasoning of the Builder's engineer. So far almost all engineers for Owners tend to give their opinions erring on the side of caution, but do not go on to point out in specific details where the Alternative solutions cannot comply with the applicable Standards. In the current case the engineer for the

Owners has correctly drawn attention to the need for diversionary drainage to keep water away from the foundations, which by themselves would not comply with the Standard. The engineer for the Builder has used both a knowledge of local conditions and other recommendations to come up with what is in effect an Alternative Solution and that aspect will be dealt with later in these Reasons.

2.2 Second Owners' Rights to claim

- 2.2.1 This preliminary issue involves the extent to which a person as a Second Owner can claim against a Builder for matters omitted, or which are not of a workmanlike quality which matters existed at the time of sale. Since the Complainants as Second Owners did not have a contract with the Builder the issues concerning the main structure have to be resolved in accordance with section 12A of the Builders' Registration Act.

But the position is complicated in this matter, because the building was far from complete when the Owner-Builder took over the property and subsequently did work to complete the outstanding matters for which the Owner-Builder will be responsible. To add to the confusion it was alleged the Shire of Denmark had listed certain requirements some of which had not been followed through by the time the Complainants bought the property or became evident after sale. These were then raised by the Shire after the completion of the sale.

- 2.2.2 The agreement between the Owner-Builder and the Builder as to who ultimately was responsible for what aspects of the building is at pages 133 – 163 of our papers. This differs from the Shire copy because the two parties made subsequent changes. In particular the Builder took over the preparation of the block and the site before placement of the pad. The total price was then stated to be \$46,050. Nonetheless sufficient evidence was obtained during the hearing to enable us to ascertain who was responsible for which aspects of the construction.
- 2.2.3 The issue concerning the Builder is reasonably clear. Any defect which becomes apparent and is not the result of normal wear and tear requiring maintenance, has to be remedied by the Builder within the normal six year term from completion of the building. If the defect was however obvious on the sale this is a patent defect as described below. Does the subsequent sale exonerate the Builder? Unless there is some specific reference in the sale documents, the new Owner gains against the Owner-Builder by virtue of a lower sale price, but is then entitled to take the steps available to the former Owner-Builder to have the defects remedied. The Second Owner has not gained financially against the Builder and can pursue the normal Section 12A action under the Builders' Registration Act. However the Second Owner cannot take advantage of an action under the Home Building Contracts Act, because no contract exists between the parties. Neither can the Second Owner claim for omissions against the Builder because those omissions are reflected in the price realised on the sale and one pays a lower price for an incomplete house.
- 2.2.4 The issue concerning the Owner-Builder concerns what in conveyancing practice is referred to as "latent defects" or defects which are not visible on any reasonably careful inspection of the property. "Latent defects" are those which a purchaser cannot observe even if reasonable care is exercised through an inspection prior to sale. These would be defects which a builder, whether the First or Second Respondent can be ordered to remedy under Section 12A of the Builders' Registration Act.

- 2.2.5 Patent defects are those which could or would have been noticed with a careful inspection. In the case of *Radisson v Jankovic* (1987) VR255 the purchasers had noticed minor cracks prior to entering into the contract. However afterwards they found serious cracks and obtained information that work had been done to stop movement in the foundations. In the absence of fraudulent concealment or of misrepresentation, or of express agreement, the vendor (i.e. the Owner-Builder) was not liable even if aware of the existence of cracking. In Voumard "The Sale of Land" – 5th edition at para 7110 it is submitted by the author that in the absence of a representation or warranty the vendor is not required to disclose defects.

At para 7150 it is stated that where the defect is not substantial, the sale will be enforced, but the purchaser could be entitled to compensation for ordinary breach of contract. That action would be taken under the Sale of Land Act not the Home Building Contracts Act. But where again the defects are not obvious or are in breach of some by-law or health and safety regulations then the Second Owner can take action against the Builder under the Builders' Registration Act.

- 2.2.6 The following conclusions can be drawn to determine the responsibilities of each party –

- .1 The Builder and/or the Owner-Builder are liable for hidden defects which a reasonably careful inspection would not reveal and S12A applies to the person carrying out the work.
- .2 Neither the Builder nor the Owner-Builder are responsible for omissions in the works (e.g. gutters) which are obviously patent omissions and which affect the price of the property. To order the Owner-Builder to complete such omissions to the Works known to the purchasers at sale is a form of double-dipping and would be inequitable.
- .3 The Builder and Owner-Builder are not responsible for what are essentially maintenance items. The building is now almost six years old. No Owner can expect to have a building free of minor cracks after that period of time. Further all authorities agree that an Owner must take reasonable steps to maintain the property and not in effect exacerbate any existing flaws.
- .4 There are the odd items which do not fall into the above categories. First, there may be aspects of construction which are not obvious defects to an inexperienced purchaser, but which can be seen on a tour of inspection. Secondly, there are defects for which there is no obvious cause but which one would not expect in a house which is still relatively new. In effect they are evidence of poor workmanship. We would classify each of these terms as poor workmanship and order the Respondent to make good under Section 12A of the Act.

2.3 Evidence of Experts

Two engineers as experts were called to give evidence – Mr Vladich for the Complainants and Mr Portas for the Respondents. Mr Stretton of the Builders' Registration Board was also present to give evidence on his report. Mr Portas was contacted by a telephone hook-up and the Complainants had full opportunity to cross-examine him on the issues, particularly over the foundations. Two experts were not called – Mr Unger for the Complainants and Mr Lodge who carried out

the Owner-Builder Inspection Report at page 202 of our papers for the Owner-Builder. The Respondents expressed concern at any reference to the report of Mr Unger being referred to by the Complainants. Such references can only be of direct value where the author has been present to give evidence on the report. In this instance Section 79C of the Evidence Act 1906 applies. The cost to the parties of calling Mr Unger from Albany meant that Section 79C(2)(g) was applicable. In the circumstances the reports were left on the files, but their only relevance would be where they referred to a matter in question which was not already covered by Mr Vladich or Mr Portas and which required some expert advice. In the circumstances we had no need to refer to their evidence after all direct evidence had been given.

2.4 Compliance with Plans

- 2.4.1 The Complainants made much of the fact that the building as completed did not accord with the plans as approved by the Shire, particularly in relation to its position on the block and the resulting effect on the rear foundations. In reality this criticism is the same as that of non-conformity with the Building Code. The Shire in Exhibit 2 in a letter of 23 December 2003 were concerned with -

Item 1 – encroachment of buildings on boundaries requiring rectification.

Items 2, 4, 5, 6, 11, 12 which require engineering certification. In effect the shire is requesting confirmation of an alternative solution or that rectification has taken place to follow the plans. A set of as built plans showing the rectification work accompanied by the engineer's certificate is required.

Item 3 – the erection of the outbuilding which does not come within our jurisdiction where the complaint here is about the erection without permission. But there is a minor item with the lack of a step.

Item 7 relates to Item 5 and Item 8 is no longer an issue.

Item 9 – White ant notice – see below.

Item 10 – not in issue.

- 2.4.2 In accordance with conveyancing practice the Complainants as the current owners will be required to present the evidence to the Shire that the building conforms to Shire requirements. Once the matters ordered by this Tribunal have been carried out by the respective Respondents, they will have to forward the appropriate documents to the Complainants to take the necessary action. We emphasise that it would be both helpful and sensible were the First Respondent to check with the Shire that on presentation of the documents that will end the matter, so far as the Shire is concerned.

3.0 CONSIDERATION OF INDIVIDUAL ITEMS OF COMPLAINT

- 3.1 In considering these matters we have followed the numbering in Mr Stretton's report of 18 July 2003.

- 1(a) As movement in this wall of the dining room was not the cause of the crack we consider this to be a maintenance item given the age of the building.

- 1(b) Horizontal cracks of this nature are due to the presence of the damp course and that damp course is referred to in the industry as a "bond breaker". Usually a thin layer of cement between the bricks on the exterior conceals the break, but nothing comes of this complaint. No proof was provided that it somehow impaired the structural stability of the building. The complaint is dismissed.
- 1(c) Dining room entry door crack – no longer in issue and a maintenance item.
- 1(d) Mezzanine cracks – these were minor and no evidence was given that they exceeded maintenance responsibility.
- 2(a) Kitchen window. There are substantial cracks both on the inside and outside walls in relation to this matter. It is unclear as to the cause but would possibly be linked to settlement of the house exceeding normal requirements. It is clearly beyond maintenance responsibility. It would have been evident on purchase. However we consider that it is associated with queries in relation to exterior drainage and are prepared to give the Complainants the benefit of the doubt and order that the Builder make good to this complaint under Section 12A.
- 2(b) Similarly to (a) we consider that this item also has occurred due to release of stress and the Builder should make good.
- 2(c) As with item 1(d) this is a maintenance matter.
- 3(a) Hallway – minor crack and so a maintenance matter.
- 3(b) Cracks near bedroom 2 door. The evidence in relation to this matter was conjectural. The width is only 1mm and the structure has stabilised over the period of its existence. We consider there is no evidence to point to any underlying structural fault and so this remains a maintenance matter.
- 4 Cracks in lounge. As Mr Stretton pointed out this is a fairly common occurrence and there is no crack in the tiles. Accordingly we consider this to be a maintenance matter.
- 5 Wall damage – sliding door This is not a crack but a bulge in the wall where the timber framing may have a slight warp. It is the only occurrence of this nature and is more of cosmetic impact than one of any structural deficiency. The wall is otherwise apparently sound. Due to its insignificance the complaint is dismissed.
- 6 Separation of wall and pad – bedroom 3. There is a hairline crack which is hardly visible in bedroom 2 between the wall and pad. There is no cracking to the floor and the wall is solid and does not move. This seems to be due to some settlement but has no long-term implications. We consider this to be a maintenance matter.
- 7(a) Bedroom 2 (not 3 as stated). Mr Stretton considered this to be a combination of slight settlement and shrinkage of the mortar. These are Verticore bricks and while the Complainants did demonstrate some movement in the wall there is no vertical cracking in the wall itself. We consider this to be a maintenance matter.

7(b) See number 7(a) above.

8 External brickwork.

- (a) This crack follows the horizontal line between pad and brickwork. Again where an Alco flashing is used there will be a break in the bond. Some slight movement of the pad also would have occurred since the bottom course appears to project slightly according to the Inspector. However Hampton bricks were used and these vary in size. If now stabilised according to Mr Stretton then as the building is five years old no consequences are likely to follow. There are no structural failures evident. As with the claim for item 1(b) the claim is dismissed.
- (b)(i) Cracking above kitchen window – see item 2(a). the Builder must make good.
- (b)(ii) Bedroom 3 window, bathroom window, laundry door. We accept the evidence of Mr Portas in his report of 28 January 2004 (page 260) when he states "It is clear that the walls comply with requirements of AS2870 and are performing satisfactorily." This was based on cracks of no more than 1mm in diameter as applies here.
- (c) Vertical crack over kitchen window – see item 2(a) – Builder to make good.
- (d) Retaining wall – crack. This wall was not part of the house and in any event the Inspector could find no evidence it would fail. The issue of its existence is a matter for the Shire Council and an engineering report as to its performance as a wall. This is an obligation required of the Owner-Builder to effect repairs to the cracks.
- (e) Retaining wall – second crack – see commentary above at (d).

9 Foundations

- (a)-(j) A large portion of the evidence was concerned with the issue of foundations and their adequacy. The house had been moved back from its original planned position to accommodate the needs for a separate septic system at the front. This decision was obviously made after the sand pad had been completed with the result that the rear foundations are either in the clay or resting on it because of minimal depth of sand. As the complainants emphasised this does not accord with the guidelines set out in AS2870. However the performance requirements are for a stable pad and foundations so that there is only a minimal movement of the pad in all weather conditions. At page 4 of AS2870, the design has to accommodate for swelling and shrinkage of the soil. At page 7 it is noted that all building materials move by expanding (bricks) or contracting (timber/plasterboard) so some cracking is inevitable.

Class S sites are those which include silts and some clays for which only slight movement is expected with an upper limit of 20mm total settlement or reactive movement. Class M sites are moderately reactive with a movement of 20mm <y5 <40mm where y has a 5% chance of being exceeded in the lifetime of the house. Given the performance of the house

so far with no cracking in the pad that can be seen, this site appears to be at the lower end of M. In his report of 29 January 2004 Mr Portas stated that "clay on Weedon Hill is known (by local Engineers) to be moderately reactive with linear shrinkage usually between 8% and 10%." This would place it in Class S. Accordingly it is open to the Respondents to put forward an alternative Building Solution in the form of the sub-surface drain at the back of the house with the surface drain further up the hill behind the wall and first drain.

The test holes dug by Mr Vladich on 18 July 2003 show that the sub-soil at the centre where there is very little cracking is dry whereas those at the corners of the foundations were damp. It is uncertain whether the dampness comes from inadequacy of the extent of the drains, or from deficiencies in the gutters and finish of the house adjoining the garage. All engineers drew attention to the need to adequately drain water coming from the hill behind the house away from the foundations. Mr Portas in his report of 29 January at page 2 (page 259 of our papers) states "Remedial work necessary relative to possible foundation movement can be limited by providing adequate drainage to cut off water flowing down the slope towards the house." He also did not recommend excavating into the clay since water will run through fissures in the clay sometimes releasing springs. The evidence of Mr Vladich who was extremely cautious in his findings however recommended at pages 5 and 6 an enlarged drain in that the water should be carried away by drains on the side of the house. He also recommended a membrane under the rear brick paving. Accordingly both engineers were in agreement as to the solution but differed on the extent required for the drains.

Accordingly we do not see any reason for the award of compensation or an order for remedial work to the foundations of the house. However it is imperative that in the light of the knowledge now gained that both Respondents should check and confirm that the drains are satisfactorily designed and installed so that sub-soil water is adequately diverted away from the foundations. The Respondents will also need to consider with the engineer any requirements for diversion of water falling on the ground adjacent to the foundations. To these ends they then need to obtain the necessary engineer's report to satisfy the requirements of the Shire Council. That report will then need to be given to the Complainants to lodge with the Shire Council.

After that, the responsibility lies with the Complainants to keep the drains clear and properly maintained in accordance with the advice given in AS2870 at page 7 where it is stated "To avoid extreme moisture conditions, it is essential that Owners become aware of their responsibility to care for and adequately maintain a reactive clay site."

For comments on foundations at the front, see para 10.

10 Front Deck

- (a)–(g) This deck was installed by the First Respondent as the Owner-Builder. It was accepted by the Respondent that there were deficiencies in the decking. Both engineers agreed on remedial work except in relation to protection of the foundation to the house. Because there was inadequate

distance between the beam and the ground for the purposes of protection against white ant, there was a query as to whether the sand pad could be exposed were the ground level to be reduced. Mr Portas in his report of 29 January 2004 with reference to Mr Vladich's comments at page 5 para 1 considered that the pile and footings taken down to the rock accomplished the requirement to retain the sand. Whatever solution is effected will be the responsibility of the Owner-Builder with the agreement of the engineer when he attends to the remedial work. Most of the deficiencies were hidden from view and are appropriately subject to orders to remedy in accordance with Section 12A of the Builders' Registration Act including the provision for Stump Ant Caps. The need to protect the hole in the deck is a safety issue which the Owner-Builder must rectify as an issue of poor workmanship.

11 Rear Deck

- (a) All witnesses agreed that the rear deck needed to be secured in accordance with the directions of an engineer. According to the records at page 147 this deck was installed by the Owner-Builder and he will need to ensure that it complies with the engineer's certification requirements.

12 Shed

The only aspect which affects us is the safety issue raised by the Shire in the lack of a front step. The Owner-Builder who installed the shed agreed to remedy the omission.

13 Carport

- (a) The roofline extends over the boundary. The Shire has suggested alternatives in its report which should be addressed, as the encroachment could be considered as being short of a workmanlike finish unless an alternative solution can be found. The Owner-Builder is responsible here.
- (b)(c) All of these matters were not opposed by the Respondents. They are minor & (d) but concern workmanship issues which would not be readily appreciated by the Complainants on purchase. Accordingly the Owner-Builder is required to remedy the deficiencies in the carport as page 147 indicates this was installed by him.

14 Roofing

- (a) The strength of the roofing beams was queried by the Inspector. After calculations Mr Portas confirmed their adequacy as also Mr Vladich. Mr Vladich drew attention to minor matters as set out below but otherwise the complaint over the beams is dismissed.
- (b) Beams - to be bolted at top of stairs. The plans required bolts (see page 104) as also the Code. We agree the builder should supply and fix these.
- (c) Roof over front deck – again this is an engineering matter and provided the engineer for the Respondents certifies the beam as adequate for the purpose than that is all that is required to meet the Performance Standards required under the Code. Mr Portas has done the necessary calculations at

page 216 of our papers. Mr Vladich merely questioned the adequacy but without calculations. In the circumstances the complaint is dismissed.

- (d) Main roof section – insufficiently screwed down. The Owner-Builder accepted responsibility to correct this matter as poor workmanship.
- (e) Rear gable roofing – barge and flashing not fitted. Despite this work being obvious on purchase, it is an example of incomplete workmanship of which the Complainant would be unaware of the consequences. Durable timber has not been protected. The builder must make good to this section under Section 12A of the Act.
- (f) Downpipe and Gutter on western corner - the Owner-Builder agreed that he would refit this item while attending to other work on the house.
- (g) Lack of hip flashing – this is an obvious omission at the purchase inspection. As the Complainants bought the house in this condition the omission remains their responsibility.
- (h) Apron-flashing – see (g) above – same situation.
- (i) Gutters on north-east corner - removed for summer and not replaced. The complaint is dismissed.
- (j) Nails for support of gutters – complaint dropped.
- (k) Carport – screwing down sections – the Owner-Builder agreed to attend to this matter.
- (l) Roof sheet – this sheet was installed upside-down and so there is insufficient overlap. This is a failure to finish off in a workmanlike manner and the Builder must attend to the making good of this item.
- (m) Roof sheet- incorrect overlap – as for (l) above the Builder is to remedy this error.

14A Pest Control (incorrectly numbered 14 and referred to here as 14A).

- (a) White Ant Spraying – this issue is largely academic given the age of the house and the weaker solutions now being used. The most important certificate for work done under the slab was produced and presumably is now with the Complainants – see pps 213 – 214 of our pages. The Owner-Builder stated that Stage 2 of the perimeter had been done but the certificate was missing. Since the Owners will need to again treat the area themselves as a matter of prudence and there is no evidence of infestation the complaint is dismissed. In any event the issue was subject to a Sale Condition on the Offer and Acceptance agreement and can be pursued on that document in another court if necessary.
- (b) Black Ant Infestation – not a matter for this Tribunal and matter dismissed.

- (c) White Ant Notice for Shire – this issue is for the Complainants to provide the Shire with a copy of the notice if that body still requires it.
- 15 Surveying – this has been done – see pages 106 – 107 – complaint dismissed.
- 16 Storm Water Damage – this matter was withdrawn and complaint dismissed.
- 17 Smoke Detector Not Working – the Owner-Builder agreed to verify that the wiring was correctly installed.
- 18 Combustion Heater – the only remaining complaint concerns the inadequate support. This is a workmanship issue and the Owner-Builder agreed to remedy the matter by either riveting or anchoring back.
- 19 Flooring – missing section – the Owner-Builder agreed to remedy this omission under Section 12A requirements.
- 20 Balustrading- the Complainants have remedied this matter themselves and their claim is for a refund of expenses. The issue concerns the original height which was lower than the safety requirements prescribed by the relevant authorities. This would not be a matter immediately apparent on an inspection of the house. Accordingly, the Owner-Builder would be required to remedy the poor workmanship. Due to the disagreements between the parties the Owner-Builder was not given that opportunity. The Owners claimed \$223 for materials. We would allow the sum of \$200 representing what would be the likely discounted price to the Owner-Builder in the trade. As to the \$300 for work done by the Complainants in their spare time, there is no loss here. In law work done by the Owner who does not ordinarily charge for that type of work cannot be claimed, because the Owner does not suffer a financial loss.
- 21 Exposed Insulation – this matter was obvious on the inspection prior to purchase of the property and accordingly the Owners accepted that they would be taking any remedial action. This claim is dismissed.
- 22 Kitchen
- (a) Tiling crack – the complainants withdrew this claim. In any event the cause appears to be as the result of slight movement in the sub-strata and with all such claims this becomes a matter of maintenance.
- (b) Crack in sink- this comes under the Contract of Sale and its condition was accepted on purchase. The sink is serviceable. This claim is dismissed.
- (c) Gap between kitchen bench and wall tiles- this has been fixed by the Owner. All it required was a beading to be installed and comes within the matters accepted on sale of the property. The complaint is dismissed.
- (d) Door jamb not fitted to pantry door – this is part of the obvious condition on sale of the house and the complaint is dismissed.

- (e) Incomplete finish to pantry – as per item (d) above and this complaint is dismissed as buyer responsibility.
 - (f) Oven door spring – the warranty has expired and becomes a matter of Owner maintenance.
 - (g) Exhaust fans – there is no exhaust fan fitted above the stove. There appears to be no requirement by the Shire of Denmark for such an item and the omission was obvious on inspection of the house prior to sale. The complaint is dismissed.
- 23 Laundry – the Complainants withdrew items (a) and (b). However under item 23(c) the Owner-Builder should ensure that the WC door complies with the Building Code.
- 24 Bathroom
- The Complainants withdrew this item.
- 25 (a) and (b)
- Bedroom 1- omissions to door jamb and cornices. This is the same position as in the pantry – see items 22(d)(e). For the same reasons that the condition was obvious on the purchase of the property these complaints are dismissed.
- 26 Mezzanine roof leakage – this matter was withdrawn by the Complainants as action by the Builder under 14(l) will eliminate leaking.

3.2 In relation to the engineering evidence we have accepted the primary evidence of Mr Portas. He has the advantage of knowledge of local conditions and his evidence in the phone hook-up was not faulted. In fact in his report Mr Vladich really only differed in detail and in the extent of remedial work required. The conclusions of Mr Portas were therefore not seriously challenged and the Tribunal has no reason but to accept that those conclusions are an appropriate basis for what the Building Code refers to as a Building Solution and which is a combination of Deemed-to-Satisfy Provisions and Alternative Solutions. The Local Authority is also prepared to accept such a Solution given the contents of their letter of 23 December 2003.

3.3 The critical factors in this matter are to ensure that the drainage is working properly before too much of the winter has progressed. It is imperative that the Complainants devolve authority to the tenants to make arrangements with the Builder and Owner-Builder direct for entry at their convenience to have these matters ordered by this Tribunal completed as soon as possible and the necessary work completed to the gutters, downpipes and drains. The Owner-Builder at the hearing sought three months to effect the repairs. That is the most we could reasonably allow and will be an Order accordingly allowing for three months from 22 April 2004.

4.0 COMPENSATION AND COSTS

In their submissions the Complainants referred to –

4.1 Compensation

We understood them to imply that the house should be sold as is for what it is worth with full disclosure of their list of defects. Such a negative approach is unlikely to receive much sympathy in any Court or Tribunal because of the rule of law requiring claimants to take all reasonable steps to mitigate loss. The Complainants would be well advised to obtain professional and legal advice before taking the matter further, other than requesting a further Inspection Report from the Inspector should the Complainants be concerned any remedial work has not been properly carried out.

4.2 Costs

Included in the papers are claims for reimbursement of costs incurred and expenses shown on copies of various accounts of experts. There will be bills for the appearance of the witnesses at the hearing. Under Section 17(4)(c) of the Home Building Contracts Act the Tribunal may order the reimbursement of such costs. While we have not heard the Complainants expressly on this point, we note that none of the parties won all of the points they had claimed or defended. Accordingly, where all parties have been found to be at fault, then we do not consider it appropriate to award costs to any party. There is the one exception with the materials for the balustrading. Otherwise we consider each party should bear their own costs. An order will be made to that effect.

D FORRESTER
DEPUTY CHAIRMAN