



AUSTRALIAN
SOCIETY OF
BUILDING
CONSULTANTS

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Inside this issue:

Procedure for Rectifying Flashing/ Damp course.	2
John R. Coghlan	
What Every Building Inspector must know about ground moisture.	3
Robert Jaentsch	
Lathe & Plaster,	4-5
Kevin Jennings	
Soil movement.	5-2
Kevin Jennings	
Member Profile	6-8
Discovery obligations explained.	7
Mary Nemeth	

A.S.B.C News

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MARCH 2007

FROM THE EDITOR :

Welcome to the first edition for 2007 of the ASBC Newsletter. Christmas is but a fading memory as we are right back into handling those building problems. Our long hot dry summer has certainly created plenty of cracks to inspect!



May 2007 be a challenging and rewarding year for all our members.

Newly elected committee member Michael Fagan, has been forced to resign from the committee. Michael has taken up a position in Canberra with the Government as a Construction Manager. However Michael has retained his membership; no doubt he expects to return! We wish Michael well in his new endeavour.

As the Society's web site position on the search engines listing is dependant upon the number of enquiries the site receives, it would be great if every time a member logged onto their computer, they went into www.buildingconsultant.net which would be counted as an enquiry. So how about putting the site in to your "favourites" and registering a few hits.

I have slightly changed the format of this edition of the Newsletter by the increased publication of articles submitted by the members. Ideally, my aim for the newsletter is one in which members share their experiences, reports, incidents or any item which they feel would interest other members.

Robert Quick

FROM THE PRESIDENT :

I Welcome to all members and friends.



2007 started with the usual fireworks and the heat continues. At long last the Building Commission has granted the Australian Society of Building Consultants to be an authorised provider of continuing professional development programmes.

Your Committee is working hard to ensure that an exciting programme of information is delivered throughout the year. There will be a Seminar later in the year and the date should be set in the next four to five weeks.

I look forward to meeting you and your guests at our next meeting in June at the Tudor.

Perry Setford

Your Own Webpage

We have obtained from the developer of our website a special offer for a professional, single page web template profile for members to help generate more business for you. This web page will include:

- Business Profile & Contacts
- Professional Experience
- Service Areas & Expertise
- Business Logo (if available)
- Up to 3 photos (e.g. of previous projects of consultant, etc)
- An enquiry form linked to the consultant's email address.

Contact : Committee Member

Robert Thompson 0419 357094

PROCEDURE FOR RECTIFYING FLASHING/DAMPCOURSE: When not carried through the full width of masonry and render in brick veneer on concrete slab construction

By John R Coghlan

Carefully remove three bricks at a time in the relevant course leaving two bricks and then remove the next three around the outer wall of the house.

Where three bricks have been removed clean out any mortar lying in the base of the cavity and insert plastic dampcourse sheeting under the existing flashing and extending out past the edge of the masonry and the render. (If the wall is not rendered the flashing need only extend out beyond the face of the mortar in the bed joint.) If it is found that there is no flashing in place extend the damp proof course sheeting up the wall against the plate and studs to form the flashing. Replace the centre of the three bricks and proceed to the next group of three.

Plan the location of the weepholes – one every four bricks – and mark the location on the course above.

After completing the process around the perimeter, the mortar in the replaced brick should have gone off and be carrying the load.

Now remove the two bricks originally left leaving a space of four bricks.

Clean out cavity and insert dampproof material as before overlapping the piece inserted in the three-brick space by a half brick at each end and then lay the four bricks in the space building in any weephole in the section of brickwork. Make sure the weepholes are clear of mortar. Move on to repeat the process with the next two bricks until all bricks in the course have been replaced.

With tall windows – and other tall openings in the brickwork – having few bricks under them the sills may be disturbed and in that event will need to be replaced,

Trim the edge of the damp course sheeting so that it can just be seen on the face of the bed joint.

If the work is to be rendered apply the render to the new course of bricks being careful to keep the weepholes clear and then trim the edge of the plastic damp course off back close to the render finish. A vee-joint in the render can be formed to “hide” the edge of the plastic if desired. Repaired render work may need to be resurfaced to provide a uniform colour over the whole of the render face.

Continued from page 5

Dishing to a building with a concrete floor will result in the slab having a hollow of up to 80mm in more severe cases.

Rectification

Doming of slabs is usually left and attention to site drainage or investigations and repair of any water seepage should be carried out.

Severe dishing of a slab can be rectified by pumping a leveling compound under the slab a procedure that is carried out by firms who specialize in this process.

Quite often timber buildings with doming are left as the problem is not likely to worsen. However, should any refurbishment, renovation or renovations to the building be contemplated it would be wise to restump or relevel the floor prior to any such work taking place.

Recommendation

Doming or dishing is usually related to moisture changes within the soil and care needs to be taken with buildings that are constructed in areas susceptible to this problem to ensure that surface or stormwater is directed away from the sub-floor and perimeter of the structure with special attention paid to leaking plumbing fixtures under the building and downpipes and paths at the outer walls. It is also often advisable to provide a complete drainage system that consists of agricultural drains and stormwater pipes connected to the legal point of discharge via a system that contains silt traps and suitably graded pipes.

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What every Building Inspector must know about ground moisture

Ground moisture below timber floors can be a source of major building damage. It is, of course the fundamental cause of rising damp. But even if a damp proof course is sound sub-floor moisture can still create other problems. Some of the conditions caused by dampness in sub-floors are:

1. An unpleasant musty odour inside a building;
2. Visible signs of mould or mildew on skirting boards or walls;
3. Flaking paintwork or powdering plaster above skirting boards;
4. "Cupping" of floor boards;
5. Rotting of timber bearers and floor boards;
6. Dry rot caused by the presence of fungi;
7. Termites, wood borer or infestation by cockroaches.

It's surprising how few householders know about the damage that can be caused by ground moisture under timber floors. Often they can identify the problem but do not know its cause or how to prevent it.

Timber floors should always be ventilated. As long as there is movement of air beneath them there is unlikely to be a problem. All buildings with timber floors should be provided with air vents in perimeter walls that are below the floor level. If there are enough air vents even a slight outside air movement is enough to ventilate the under floor area and keep it free from ground moisture.

There are, however, certain building situations where this ventilation is cut off. For example a common party wall can block off any change of adequate cross ventilation. In houses where the floor is close to the ground air vents are sometimes placed in brickwork above the floor level. This creates a circuitous route for ventilation air and often restricts or completely cuts off air movement.

Brick interior walls required foundations beneath the floor and these will obstruct the floor of ventilation air. Heating ducts beneath the floor frequently obstruct the movement of ventilation air. Often a combination of these factors eliminates any chance of adequate under floor ventilation. The result is that ground moisture builds up over time. As the moisture increases relative humidity rises.

Mould and fungi spores that are always present in the air begin to germinate in high humidity. This is the cause of mould and mildew, which can spread inside the building and is normally accompanied by an unpleasant musty odour. This can be distressing for sufferers of asthma and allergies. Mould and mildew usually first appear on skirting boards and plaster close to skirting boards.

If unchecked they will spread higher. Sub-floor moisture can also be absorbed by plaster and bricks and over time rises upward to cause flaking of paintwork and powdering of plaster.

Excess moisture below the floor can be absorbed by the untreated lower surface of timber floors causing the boards to swell which leads to "cupping". This is where floor boards buckle upwards at the joints causing a ripple effect that destroys the good looks of polished floor boards.

In severe cases moisture will settle on timber bearers causing them to rot and eventually collapse. Or fungal decay may cause the condition known as "dry rot" where even well seasoned timber crumbles to powder and can spread rapidly through buildings. Also termites, wood-borer and cockroaches thrive in dark, damp conditions.

In most cases the solution to these problems is a job for an expert. New Age Ventilation has been tackling these problems for years and has developed proven mechanical ventilation systems to combat the problem.

If you come across any of these symptoms in the residence of one of your clients, then call New Age Ventilation for expert advice on how to tackle the problem; telephone 9849 0776.

Speak to Robert. He'll be glad to hear from you.

For further information contact:
Robert Jaentsch
New Age Ventilation
 661 Canterbury Road, Surrey Hills, 3127
 Telephone: 9849 0776

Lathe & Plaster Walls & Ceilings

This article is part of a booklet written by Member Mr Kevin Jennings. Mr Jennings has kindly let us print extracts from it.

Lathe and plaster lining to walls, unless heavily cracked and loose, can usually simply be repaired. It is often the case that quite a bit of cracking appears at the sides of chimneys and over windows and doors where settlement often occurs.

To replace the plaster to the walls with plasterboard it is advisable that the lathes be left on the wall and packing provided at the position of the wall studs of sufficient thickness to make up the difference between plasterboard and plaster. If packing is not carried out the architraves and skirting boards within a room will require packing or, if nailed against the plaster board, will be too short.

Lathe and plaster lining to the ceiling is a different case as the plaster is actually often too heavy for the size of timbers used in the ceiling to span the rooms. Often large deflections in ceiling timbers can be observed in the roof space which shows up as a sag in the ceiling and extensive cracking is then usually visible to the underside of the ceiling.

When the first coat of plaster is applied to the lathes of the ceiling the plaster forms a mushroom shape on top of the lathes which gives the plaster a key and holds it securely in position. As is often the case, water seepage from a leaking roof or plumbing fittings can dissolve the top of the plaster and, as a result, parts or all of the ceiling can then collapse into the room below. Rodents have also been known to chew the top of the plaster creating the same problem.

It is often wise to replace the plaster to the ceiling with plasterboard if extensive cracking is evident at the face of the plaster and certainly if the top of the plaster above the lathes has been dissolved or eaten away. Plaster decorative ceiling roses and cornices are available to suit the decor of most period homes and provide a light weight ceiling system more suited to the size of the ceiling timbers in most of these buildings.

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sive cracking is then usually visible to the underside of the ceiling.

Fibrous plaster sheeting which is often present to the ceilings or ceilings and walls of older buildings typically bows down between the joists and often becomes separated from the ceiling joists, especially if the ceiling becomes wet, making subsequent refixing of the ceiling sheeting necessary.

Walls to solid brick buildings are usually hard plaster over solid brickwork.

More modern buildings or extensions have plasterboard or similar linings in place, some of which are able to be used in wet areas. Plasterboard walls and ceilings to newer structures or extensions should not show evidence of nail popping or have obvious peaking of the sheet joins when viewed in natural light.

Plasterboard walls and ceilings to newer structures should not show evidence of nail popping or have obvious peaking of the sheet joins when viewed in natural light.

Any evidence of water seepage to a newer building is also considered to be a defect.

Walls that are covered in wallpaper or lined in various finishes make it difficult to assess the condition of the walls i.e., locating cracking to the plasterwork, etc.

Cracking to Plaster Walls & Ceilings

The walls at either side of a brick fireplace usually have more substantial cracking or settlement which is due to the fact that the fireplace which would be sitting on large footings either stays in position while the walls either side subside slightly or the fireplace, in some instances, can rise slightly while the walls either side of the fireplace stay in position hence, the cracking or settlement, which is typical.

Cracking is often evident to walls and ceilings due to typical settlement to the building either from movement of the foundations or pressure to the walls from the structure above for various reasons, which are detailed in other parts of this report.

Typical areas of cracking are:

Walls

- * above door openings;
- * above and below window openings (often

at the plaster joins);

- * at internal corners, especially if different materials butt at corners e.g. timber to brick-work;
- * at sides of arches and at junctions to beams over wide openings;
- * at sides of fireplaces and at wall returns;
- * at wall returns;
- * under concentrations of roof loadings e.g. roof propping, supporting beams, hot water services, etc.

Ceilings

- * at sheet joins;
- * at sides of fireplace;
- * at sides of skylights or vents;
- * at wall returns e.g. L shaped rooms or junctions of passageways;
- * there is often separation at the junction of the ceilings with the walls along the cornice, which is often more pronounced if different surfaces come into contact e.g., plaster cornice to solid brick or timber lining.

Hairline cracking can become evident to most buildings over time even to newer structures due to seasonal movement of soils which can be more pronounced in areas of known soil movement.

Hard Plastered Walls

It is impossible to determine the condition of brickwork to a building under hard plaster without completely stripping the existing plaster from the wall. Often the bricks used are quite soft and crumbly and even in a more modern structure, second grade bricks are often used. It is also difficult to determine the condition of the face of the hard plaster without scoring or scratching the surface which is not practical when carrying out an inspection.

Often the face of the plaster can also be quite drummy and soft and some repair work or complete replacement of the plaster work should be allowed for, depending on the level of perfection desired.

Should the face of the plaster work be soft, it is possible to harden the plaster with chemicals and sealer binders. Advice on these products should be obtained from a large paint supplier before wholesale stripping of plaster work is undertaken. It is quite usual for plaster to solid

brick buildings to be drummy in various places over a wall and especially to approximately 300mm above the top level of the skirting board.

SOIL MOVEMENT IN RELATION TO FLOORS.

Minor Doming & Dishing.

Some building sites contain reactive clays which swell and shrink with the change of seasons and the moisture content in the soil. This movement is described as doming when the soil becomes wet and swells, and described as dishing when the soil dries or shrinks.

Doming and dishing of the soil can have quite an effect on a building, particularly those constructed before soil testing of sites was made mandatory in the late 1970's.

Buildings Affected.

Some of the earlier brick veneer buildings constructed with either a concrete slab or timber floor, particularly those that have a flat roof or a tile roof placed over timber trusses, are especially vulnerable, particularly to doming, as they have little weight transferred to the internal walls which means that the outer walls of a particular room can have quite a bit of weight transferred to it from the roof and the movement shows up as a pronounced bulge in the centre of the room.

Movement is less noticeable if the building is of light weight construction such as weatherboard or clad frame with sheet roofing.

Effects.

In its mild form, doming will show up as a round in the floor, of varying severity, depending on the type of structure.

Dishing to a building with timber floors, results in the need to pack the top of stumps with an incompressible packing material, up to 80mm in more severe cases.

Doming and dishing can sometimes be evident in the same building and often shows up as bearers over stumps having a definite round up and other bearers requiring packing on top of the stumps. Doming of a slab has a similar appearance to a timber floor.

Continued on page 2

Member Profile continued from page 8

building as a model without the defect, full size, and a fit out was installed. Hey presto, no problem. Much to the disappointment of the lawyers, who had been feasting off the matter for years, the case was settled. My client got their money, plus interest and costs. Very happy clients, very sad lawyers.

5. ***What is the funniest situation that has occurred to you as a building consultant?***

I was on a construction site for a large religious building. A Stramit roof being installed up top while a concrete slab was being poured down below.

The sprightly site foreman decided to take the quick way down from the roof top plant room to the main roof by jumping the two and a half metres rather than using the ladder. He landed as he had planned, dead centre of a sheet of Stramit, which was supported by a purlin at each end. The sudden impact snapped the sheet and both halves shot upwards, forming a chute, through which the foreman was shot another eight metres into the wet concrete below. All be it a serious accident the humour of the moment grabbed us all.

We rushed down to rescue the poor bloke but he had entangled one leg in the two layers of steel fabric and broken it, making his liberation impossible due to the pain. The ambulance guys arrived but were unable to retrieve him, lacking the necessary equipment. The fire brigade failed to free him and by the time the contractor had managed to get a bolt cutter to the site and cut most of the reo the concrete had set and he and his rescuers were pretty well cast into the slab.

By the time he was freed he probably weight twice his original weight and I was asked to approve a variation to the contract.

When I next saw him he was on crutches and had both ears in bandages. Apparently the Stramit, being rough, had all but torn his ears off as he slipped between the two halves of the broken sheet.

I was caught in one of those embarrassing mo-

ments where the humour of the event overwhelmed its seriousness. I was lead from the scene with tears pouring down my cheeks, but not tears of sorrow.

6. ***Do you believe that the building industry needs improvement? If so in what way?***

The building industry is a dinosaur. The materials and process we use are antiquated for our environment and our builders still can't seem to understand what happens when you bring two materials together. Timber and exposed face bricks for example. All builders should be required to do a building degree before they are set loose on the paying public.

All town planners should be sent to Iraq to assist in the rebuilding of the country so we can get ourselves out of the mindset that all design is bad if it shows any evidence of modern thought.

7. ***What is your family situation?***

Secure I hope. My kids all have kids of their own and I'm hoping they will all get together and look after me when I stop looking after them. Whenever that might be.

8. ***What do you do for relaxation?***

I write. I'm on my third novel and I add to my book *Buying & fixing your home* which is reprinted each year with new and current topics added. I spend a lot of time studying and the rest is travelling and enjoying friends. There's never enough time.

9. ***Do you have any hobbies or play any sport?***

With a crook back this year things have come to a bit of a standstill. I was riding my pushbike two or three times a week but now I'm riding a motorbike while things improve. I've sold my yacht and miss the water. I enjoy most things if there is a social aspect to it.

10. ***Do you have a favourite restaurant?***

No. We eat out often and restaurants fall into one of two categories, good or bad. I found this new little Indian place at 152 Tennyson Street, Elwood this week. Tandoori Point. Pram will cook you up a treat. Get there before he gets too busy. Tell him Graham Wines sent you.

Discovery Obligations Explained

Mary Nemeth
Partner
Rigby Cooke lawyers

The purpose of discovery is to enable parties to a proceeding to see what documents each has to prove their case. As a general rule, discovery will be ordered between parties to the proceeding as soon as pleadings are closed.

Parties will be required to give discovery of all relevant documents which are in their possession, custody or power. A document is widely defined by the *Evidence Act* (Cth) to include any record of information on which there is a writing, marks, figures, symbols or perforations or anything from which sounds, images or writing can be reproduced (CD, DVD, Video Tape) or a map, plan, drawing or photograph.

Perhaps the most difficult issue to determine is what is a "relevant document".

To assess what is a relevant document you need to assess the issues in the statement of claim and the defence. Obviously a document which is evidence of a particular issue between the parties is clearly relevant. However the Courts have adopted a very broad concept of relevance which can include a much wider range of documents. In *Compagnie Financiere v Peruvian Guano* [1882] 11 QBD 55 Brett LJ said:

"... it seems to me that every document relating to the matters in the action which would not only be evidence upon any issue, but also which, it is reasonable to suppose, contains information which may either directly or indirectly enable the party requiring the affidavit either to advance its own case, or damage the case of his adversary."

Thus the obligation of a party is to discover both documents which support their case and damage their case.

Discovery will not however be limited to there. If a document would lead to a chain of enquiry, then the documents which are referred to in that chain of enquiry will also be discoverable. That is why quite often it is not until a document is analysed in detail by the parties at trial that they realize that they have failed to discover documents relevant to the case.

Often parties also forget that whilst they may not have physical possession of documents relevant to the case they still have an obligation to discover those documents. The most common example is that of financial records which are usually retained by a party's accountant.

Here are some tips on how to deal with discovery.

Provide all documents that may or may not be relevant. An assessment of their relevance will be made;

Make enquiries of all your agents who may hold documents relating to the issues in the proceeding to ensure that documents which are crucial to proving your case are discovered;

Consider what documents you may have had but no longer have in order to disclose the fact you do not have them any longer and prevent the possibility of an adverse inference being drawn against you in the case;

If in doubt about the relevance of a document, ask. There is nothing worse than trying to explain to a Court during the course of trial why your client has failed to produce documents which were relevant to the case and worse still have the other party seek an adjournment of the trial at your cost because of it.

For more information about discovery obligations please contact Mary Nemeth on 03) 9321 7810 or mnemeth@rigbycooke.com.au

March Dinner Meeting

The guest speakers at the March Dinner Meeting were Mr. Nigel Finney Chief Executive Officer and Mr. Gary Flood National Marketing Manager from Save Water Alliance.

The Savewater Alliance works with member water businesses, government and product companies to deliver water conservation programs throughout Australia. Savewater offers a combination of web resources and practical programs to assist Australians change the way they use water. The Savewater alliance also deal in related energy saving devices such as hotwater heat banks.

The save water alliance can be contacted via the web on www.savewater.com.au or by the telephone on 03 8508 6899.

MEETINGS 2007

The **proposed** meetings of the ASBC for the year 2007 are:

12th June	The Tudor, Box Hill
14th August	The Tudor, Box Hill
16th October	The Tudor, Box Hill
December	Partners Night –(TBA)

YOUR DETAILS

Have your contact details changed? If so please advise us:-

Phone: 03 9898 8760
 Fax: 03 9898 4744
 Email: info@asbc.asn.au
 Post: ASBC, C/- P.O. Box 320, Box Hill Vic. 3128

OUR WEBSITE

www.buildingconsultant.net

SUBMISSIONS TO ASBC NEWS

If you have any articles that may be of interest to other members, they may be reprinted from other publications, or if you have the writing bug, please write about your experiences. All submissions to the Editor, Robert Quick:

Email: rquick@bigpond.net.au
 Fax to: 03 9537 2339
 Post to: ASBC Newsletter
 C/- Robert Quick
 307 Beaconsfield Parade
 Middle Park Vic. 3206

The deadline for submissions to be included in the next newsletter is **20th May 2007**.

Corporate Lesson 1.

A man is getting into the shower just as his wife is finishing up her shower, when the doorbell rings. The wife quickly wraps herself in a towel and runs downstairs.

When she opens the door, there stands Bob, the next door neighbour. Before she says a word, Bob says, "I'll give you \$800 to drop that towel," After thinking for a moment, the woman drops her towel and stands naked in front of Bob.

After a few seconds, Bob hands her \$800 dollars and leaves. The woman wraps back up in the towel and goes back upstairs.

When she gets to the bathroom, her husband asks, "Who was that?"

"It was Bob the next door neighbour," she replies. "Great!" the husband says, "did he say anything about the \$800 he owes me?"

Moral of the story: If you share critical information pertaining to credit and risk with your shareholders in time, you may be in a position to prevent avoidable exposure.

MEMBER PROFILE

Graham Wines



1. *When did you join ASBC?*

I'm a new member and this is my second year with the ASBC.

2. *How long have you been a building consultant?*

I've been doing building consultancy as a specific area of my expertise since 1986 and picking up steam over the years. I did my specialisation thesis in **Building Faults and Failures** at Westminster University so I've been involved in building analysis since the late 1960s.

3. *What aspects do you specialise in?*

My specialty is building detail and analysis: (How materials should be brought together and the repercussions of doing things wrong). I have a forensic approach to my work. As I design the details others build I have some expertise in this aspect of the industry. I get to see some odd attempts to cobble things together.

As a London trained architect, (and I know you all think we are stupid and incompetent so I won't even go there), I was taught structural engineering, materials analysis, building science and detail design among the other aspects of the discipline. I did my first post grad. degree in environmental science at York University & I reckon I know a thing or two about buildings. I have an MBA from Monash, specialising in project management and the exporting of construction services overseas. I consult in these areas too so I get a great variety in my work load & get to travel too.

4. *What has been the highlight of your period as a building consultant?*

These are too many and varied to say really. One event might be of interest to your readers though. I was asked to look at a case involving a city office building. The matter was between a State Government and an international Contractor and had been going on for years and going nowhere. The claim was several tens of millions. The contractor was seeking payment. The government were seeking damages. By now my client just wanted out, at whatever loss they might sustain.

After a few weeks of examining the files and the building I came across a major flaw in the building. I was asked to re-create a single floor of the

Continued Page 6