

**If you alter the text in any material way, any attribution to Rory O'Donnell  
or the Conveyancing Committee should be removed**

## **CLIENT MEMORANDUM RE: SURVEYS OF HOUSES OR APARTMENTS**

### **1. DO I NEED TO GET THE HOUSE/APARTMENT SURVEYED?**

In our opinion there are two good reasons why a person thinking of buying a house or apartment should have it surveyed.

The first reason is because of the legal rule of "caveat emptor" (or "buyer beware") which applies to sales of buildings. A vendor of a building is under no duty to a purchaser to ensure that the building is free from defects. Unless there is agreement on the point, it is up to the purchaser to satisfy himself that the building is sound and fit for any particular purposes. There are a few exceptions to this rule - such as where there has been fraud or negligent misrepresentation, or under certain types of construction contracts - but in general the physical condition of buildings is a concern of the purchaser, not the vendor.

The second reason is that buying a house is one of the most important financial transactions in a person's life. Nearly every building will have some defects some of which could be serious. In our view it is not sensible to embark on a major investment like this without having checked it out as thoroughly as is appropriate in all the circumstances so as to be in a position to make an informed decision. The cost of doing this should be looked on as part of the investment.

### **2. SURELY IF THE LENDER GETS THE PROPERTY CHECKED OUT IT IS NOT REALLY NECESSARY TO GET A SECOND SURVEY, PARTICULARLY WHEN I HAVE TO PAY FOR IT AS WELL?**

In our opinion you cannot safely rely on the "valuation report" carried out by the lender. They usually get valuers to do inspections to establish a value of the property bearing in mind the amount of the proposed loan. Some of the "valuers" used by lenders are architects or engineers, but most are not. The valuer is not particularly concerned with defects except to the extent that they affect the value. Even an architect or engineer looking at a house to assess its value will not be looking for faults or checking all the matters he would check as part of a survey on behalf of a purchaser. Lenders advise borrowers not to rely on their "valuation report" and that for the borrowers' own protection they should get the house surveyed. Bearing in mind the fees payable for lenders' "valuations" you will appreciate that the examination of the property is fairly superficial. As of now, there has been no reported case in Ireland of a borrower who relied on a lender's surveyor succeeding in an action when defects are found in a house which the borrower felt the lender's surveyor should have seen. Several cases have been brought to Court but none of these have succeeded. On the whole, therefore, our advice is that you should place no reliance on the valuation carried out on behalf of your lender.

### **3. WHO DO I EMPLOY TO SURVEY THE PROPERTY FOR ME?**

You should have the house examined by an architect, structural engineer or building surveyor, provided he or she is experienced in house surveying. People sometimes get a friend who is qualified as an architect/engineer/surveyor to carry out a survey of a property for them sometimes without knowing whether this person has experience of house surveying or practises in an area which gives them the necessary know-how. Others get a tradesman or builder who may or may not have the necessary know-how. A good builder or tradesman with the right experience is probably as good as most surveyors but would not normally furnish a written report and would not usually have professional indemnity insurance. Our advice is to get a person who not just has paper qualifications but has the necessary experience as well. Experience of problems in buildings over a number of years enables professionals who regularly carry out surveys to know what problems to look for in different types of houses. If money were no object, you should have a property looked at by a structural engineer, and an architect (or building surveyor) and a services engineer. In the case of a private residence the cost of such inspections would be considered prohibitive by most people. Furthermore a very comprehensive survey is likely to involve taking up floorboards, and perhaps cutting holes in dry lining or plasterboard and such like, which vendors will rarely allow. One last thing to bear in mind is that if you ask a friend or a family member (whatever the qualifications) and they miss something serious it may be very difficult to take legal action for your loss due to their negligence. The safest course is to use a professional who you could take legal action against without embarrassment.

The terms "architect" and "structural engineer" need no explanation. Some explanation may be necessary about "surveyors" because there are so many different categories of surveyor. The best known of these are geo-surveyors or land surveyors who are experts in mapping, quantity surveyors who are experts in the cost of construction schemes, and general practice surveyors who are experts in estate agency, valuation, rent reviews and the development and management of property. Building surveyors offer a specialist service on all matters relating to construction and refurbishment work including the restoration of old buildings and the construction of new.

Throughout the rest of this memorandum we refer to "the surveyor" and this expression means the architect, structural engineer or building surveyor.

### **4. WHAT SHOULD A NORMAL HOUSE SURVEY COST?**

We are often asked this question and it is not an easy question to answer. Experts who carry out this type of survey normally work on the basis of being paid for their time. Their time has to cover their office rent, rates, back up staff, insurance, and other outgoings in addition to covering a profit for the professional. Surveyors also tend to charge travelling expenses if the property to be inspected is any appreciable distance away. A very detailed examination of a property, particularly if the surveyor becomes uneasy about something and requires to come back with a builder to have some part opened for inspection may cost a lot of money. We have had cases where a prospective purchaser paid ten times the norm for the survey of a residence but that was for a pain-staking and very time consuming examination of a very valuable old house. This would have included a structural survey of the house and having it and its

services carefully checked. At the other end of the spectrum you have a relatively simple survey of an "ordinary" suburban house. Because this memo is a general guide and professional fees will vary we are not going to say what a survey should cost. A quick search on the internet will provide this information. Most people choose the cheapest survey which defeats the purpose. By and large you get what you pay for. We would question whether a cheap survey is any use at all. A great deal depends on the house, its condition, and the various other factors we have attempted to cover in this memo.

Checking services (for example a septic tank and percolation area - see paragraph 8) would be prudent but takes time and will therefore increase the cost of a survey.

The reason it costs so much is because such checking takes time and because most things to be checked are either inaccessible or not readily accessible. For this reason drainage is usually not checked other than in a simplistic way.

You should not look on a survey as something that can be dispensed with. The cost of rectifying faults in a building can be very expensive and identifying them is not easy, particularly as efforts are frequently made to hide defects before a house is put up for sale. Ask yourself - can you afford to take the risk? A careful surveyor could save you from financial disaster. However getting a property surveyed is not an assurance that it is free from defects. By and large the more you spend on a survey the more likely it is that any material defects in the house will be found by the surveyor simply because he is able to spend more time on the survey and thus examine the house more closely. Before attempting to calculate what to spend on a survey you need to consider the points made in paragraph 8 below.

## **5. IS A SURVEY REALLY NECESSARY FOR A MODERN HOUSE?**

The answer is yes. However, most experienced property professionals consider a very detailed survey unnecessary in relation to a modern house in a building estate, and feel that a more careful examination is more appropriate and necessary in relation to older houses, houses which have been altered and once off houses.

Remember that a modern house may already have been altered. It is much more likely that there will be problems with the alterations than with the original structure of the house, so, if a house has been converted or extended it needs to be looked at more closely.

It is worthwhile pointing out here that it often takes some years for defects to show up in a new house. A report of building faults in new-build housing noted that:-

"Greater efforts are being made to achieve an interesting and distinctive appearance, for example by using projecting windows and porches, and different roof configurations. It is clear that defects tend to increase in proportion to such features...."

Once off houses, particularly those built by direct labour, have been the cause of many problems and deserve much closer scrutiny. (See paragraph 14 below.)

The latent defects cover given to the purchasers of new houses registered with HomeBond and similar insurers may not adequately cover a subsequent owner particularly if the defect should have been discovered on a reasonable examination by a competent surveyor. This exclusion applies whether you get the property surveyed

or not but this is another good reason why a purchaser should get a house surveyed by a competent surveyor.

## **6. HOW SHOULD I INSTRUCT A SURVEYOR?**

If you want to be able to properly rely on a surveyor's report your instructions to him need to be in writing. However, before attempting to put them in writing you should discuss and agree the general nature of the examination with the surveyor you consult. If you are not sure how to go about this most surveyors will be quite willing to write saying what he or she will do together with any general conditions which they would normally attach to the report. The potential purchaser should read all these very carefully. Some purchasers resent conditions or exclusions. In our experience they are (or should be) intended to help both the surveyor and their client. We also suggest that you discuss and agree the approximate cost beforehand. You may be able to agree a lesser fee on the basis that if the surveyor later expresses disquiet as a result of this examination, you may then sanction further work or further examinations as a result. If problems are discovered, it should not be assumed that the initial fee will cover any further action necessary or arising out of the report. Equally, the surveyor should not assume he has the right to proceed without agreement on further expenditure.

Ideally you should arrange to sit down with the surveyor to discuss the report so that he or she can explain any points which are not clear and explain the implications of the findings, the options open to you and the risks involved in purchasing the property.

We also advise that you should get a written report. This is particularly important if you intend to rely heavily on the report. It would be very difficult to sue a surveyor successfully on foot of a verbal report if it transpired that some problem was missed. Many surveyors will charge less for a verbal report on the basis that not only does it take time to write a report (which is never a routine operation in a proper inspection) but also they think (probably correctly) that they will incur less legal liability. This almost defeats the purpose of getting a proper survey done in the first place.

Purchasers of houses at auction are in a particularly difficult situation in such circumstances. If they do not do their homework they may find out that the cost of getting the house into the condition they want is beyond their resources. If they get all their homework done in advance however, it can be quite costly and this can be very frustrating if the house goes beyond their limit at auction. The only thing worse than being several hundred euros out of pocket with nothing to show for it is bidding higher than the value of the property and buying a building with serious defects. This is an area where the advice of a competent surveyor is invaluable, in trying to strike a balance between checking matters carefully enough without spending too much money.

## **7. IS IT NORMAL FOR A SURVEYOR'S REPORT TO CONTAIN PROVISIONS ABSOLVING HIM FROM LIABILITY? WILL THE SURVEYOR SAY CLEARLY WHAT IS RIGHT AND WHAT IS NOT?**

It is indeed normal and quite proper for surveyors to cover themselves against problems being found which they were not allowed look for. For example if the house had fitted carpets and the owner will not allow the surveyor to lift them it would be

reasonable to say so in the report. Similarly if a house is furnished and he is not allowed move any of the items of furniture it is reasonable to state this. It all depends on what is reasonable in the circumstances. We would expect a surveyor who gets reasonable access to a house to be able to express a firm view on the overall structure. It is much more difficult to express a firm view in relation to drainage or wiring. A surveyor can flush a toilet and see that the drains seem to be flowing freely but with an old system this does not mean that they will not give trouble. It is also very difficult to test the quality of electric wiring. The surveyor can look at the fittings but this is just a basis for deduction. The fittings or even the fuse box may have been replaced without the wiring having been upgraded. A surveyor is unlikely to save you from problems with wiring or drainage for that reason. Exclusions should make practical common sense in the light of your discussions with the surveyor. If you feel the opinions are unfairly qualified you should talk this over with the surveyor or seek the advice of your solicitor who will be impartial and who will be able to express a view on what is fair and reasonable in the circumstances. A sample set of conditions used by a firm of structural engineers is set out below. Both architects and engineers are generally quite willing to discuss and modify their conditions where appropriate.

- "(a) Structural inspections are concerned with the strength and stability of the basic structure of the building; some aspects of non-structural matters such as services, fittings, completions and finishes, doors and windows, water and weather-tightness, etc. may be noted in passing and commented on but are not dealt with comprehensively.*
- (b) Inspections do not deal comprehensively with the condition of timber and the presence or extent of fungal or insect infestation; a timber treatment specialist's advice must be sought in relation to these matters.*
- (c) Initial structural inspections are "walkaround" inspections and shall be considered as preliminary only. No opening up to expose the structure and no structural calculations are carried out. Inspections are limited to noting and commenting on visible defects which in our opinion might be symptomatic of structural distress. A more detailed investigation and appraisal can be carried out on request.*
- (d) It is not possible to state that structural elements that are covered, unexposed or inaccessible are free from defects.*
- (e) Planning permission and other building control matters, or fire risk assessment, are not considered. Inspections do not extend to legal rights of ownership such as whether dividing walls or party walls are owned by one side or the other.*
- (f) Dimensions and areas quoted are approximate. Information relating to nonphysical details is given in good faith but is normally obtained by us second-hand and no responsibility is accepted by us for its accuracy or validity.*
- (g) Reports on inspections and appraisals shall be for the private and confidential use of the client for whom the report is undertaken and shall not be reproduced in whole or in part or relied upon by third parties for any use without our express written agreement.*
- (h) This firm provide professional services in accordance with the current Conditions of Engagement of Consulting Engineers, Agreement RA 9101 ("Report and Advisory Work") published by the Institution of Engineers of*

*Ireland (copy available on request) and we shall not be liable beyond failure to exercise reasonable skill and care."*

## **8. WHAT SHOULD BE SURVEYED?**

It goes without saying that a surveyor should look at everything relevant to the condition of the house and its services in so far as is reasonable in the circumstances. The owners of a house for sale, particularly one in good condition, will not normally allow a surveyor to take up fitted carpets, or floor boards or cut holes in dry lining. Some old houses do not have any access into the roof space so that a surveyor may have no way of getting to see the roof timbers with a view to assessing their condition. Some roofs are more inaccessible than others and the same goes for the pointing of chimneys which cannot be viewed at close quarters. It would be a great help to your surveyor if you arrange beforehand for access to be as free as possible, including arranging ladders and freeing trap-doors for inspection of the attic spaces and/or the roof. Remember you are paying for his or her time and you want it to be used as productively as possible. A surveyor will not normally bring a set of ladders or someone to hold a ladder on an ordinary inspection. Finding that a ladder is needed and none is available may mean a second trip, and more cost.

A survey should not be confined just to the building. An experienced surveyor should look at various other things such as, for example:-

- (i) Are there any indications to show that the property may be liable to flooding, such as proximity to streams, open drains, etc?
- (ii) Do any rights of way affect the property? Gates or gaps in boundary fences which could indicate such rights may be obvious.
- (iii) Whether access to the property is shared with another property.
- (iv) Boundary walls, and particularly any "retaining walls" on the property.
- (v) If a property has no mains water supply and draws water from a well, it is important to establish whether the well is within the site and if it is shared with anyone else. This should also be brought to the attention of your solicitor so he can see the necessary legal agreements are in place.
- (vi) Where a house is not connected to mains drains, you need to understand what exactly the arrangements are for disposal of sewage and waste water. Most are served by a septic tank/waste disposal unit and its soak pit or percolation area needs to be checked. Many house purchasers do not know what a soak pit or percolation area is, and your surveyor will explain this to you. (See paragraph 9.)
- (vii) Settlement cracks. Many older houses have cracks which are caused by settlement. A surveyor will have the expertise to know which cracks are a cause for concern and if they are what should be done about them.
- (viii) Checking for asbestos, pyrite or other undesirable materials.
- (ix) Checking for what is known as Japanese Knotweed, an invasive plant which is expensive to get rid of and can affect foundations.

In conclusion, you should discuss with your chosen surveyor any of the above factors which may be relevant together with other relevant matters, such as the price you are likely to pay and the work or changes you may wish to carry out to the house and whether any other inspections e.g. by a structural engineer are advisable.

## **9. SEPTIC TANKS OR DOMESTIC WASTE WATER TREATMENT PLANTS**

The Environmental Protection Agency (EPA) website contains very useful guidance on all aspects of septic tanks and domestic wastewater treatment plants. Anyone who owns, or is thinking of purchasing, a house which does not have access to a local authority sewer would benefit from reading the EPA guidelines.

Houses which do not have access to a local authority sewer rely on either a septic tank or a more modern sewage treatment plant for drainage. Both will also require a percolation area. Such houses are usually located outside urban areas.

In its simplest form a septic tank is a tank which removes the gross solids from the sewage by settlement. The effluent leaving the septic tank still contains many of the contaminants of raw sewage and requires further treatment before its disposal can be regarded as satisfactory.

For single houses in Ireland the most appropriate effluent treatment is regarded as percolation through a medium, usually soil. During the passage of effluent through the medium, processes take place which reduce the number of soluble and microbiological contaminants. Where soil and ground water conditions are suitable this treatment gives satisfactory results. Where conditions are not suitable then local nuisance or water pollution can occur. The result is the ponding of effluent which gives smells and surface water pollution.

A percolation area comprises distribution pipes which are loose jointed so that the dispersal of effluent through the earth takes place over as broad an area as possible. All sorts of factors affect the smooth operation of septic tanks and percolation area drainage systems such as proximity to a river, height of the water table, the permeability of the soil etc. Water from a roof, yard or avenue should not be drained into a septic tank or waste water plant. It should be collected separately and drained into its own soakaway.

A purchaser interested in buying a house which does not have access to local authority drainage should get a surveyor to advise on the issue of drainage. This is not easy because the drains, septic tanks or waste water treatment plant and percolation area are underground. Enquiries should be made before contract as to whether the septic tank has been registered and whether it has been inspected by the Local Authority and whether any advisory notice was issued as a result.

In June 2023 the EPA released a Report indicating that 49% of treatment systems inspected failed because they were not built or maintained properly. 20% of those were considered a risk to human health or the environment. A possible fall back plan is for a purchaser to get advice from a surveyor on whether a new septic tank and percolation area could be installed within the confines of the site, and of course approximately what this would cost. At least then a purchaser will know that if the

existing waste water system is faulty the problem is one that can be sorted even if that is at a price. A purchaser should also ask the surveyor to advise:

(a) whether the septic tank and any part of the percolation area is the required distance from the house, roadway and boundary as laid down in the EPA Code of Practice; and

(b) if the septic tank and any part of the percolation area is outside the site. In the event that any part of the septic tank or percolation area is outside the site it is particularly important that this information is passed on to the purchaser's solicitor who will check to ensure that all necessary easements are in place in connection with such arrangements.

(c) if effluent from a percolation area or surface water sump are discharged outside the site in such a way as to require a Discharge Licence.

## **10. REGISTRATION OF SEPTIC TANKS**

Under the Waste Water Treatment Systems (Registration) Regulations 2012 (S.I. No. 220 of 2012), owners of houses drained by a septic tank are obliged to register it with their local authority.

Under section 70D of the Water Services Act 2007 (as inserted by Section 4 of the Water Services (Amendment) Act 2012) a person who sells a property connected to a domestic waste water treatment system (as defined in the 2012 Act) including, but not limited to, a septic tank, will be obliged on the closing of the sale to furnish a valid certificate of registration in respect of the treatment system to the purchaser.

A purchaser is obliged to notify the water services authority of the change of ownership after the sale is completed and failure to do so is an offence.

Under Section 70C there is an obligation to ensure that the plant does not constitute, and is not likely to constitute, a risk to human health or the environment and in particular it does not create a risk to water, air or soil, or plants and animals. There is also a duty not to create a nuisance through noise and odours.

## **11. SHOULD A SURVEY INCLUDE A CHECK ON THE DEED OR TITLE MAPS AND THE BOUNDARIES OF THE PROPERTY BEING PURCHASED?**

Yes. It is good practice to get copies of the map or maps from the title deeds of the property being purchased and to ask the surveyor to make a general comparison of this with the actual property on the ground. If the exact extent of the property is important (where for example development is planned on part of the property) the maps from the title deeds and the checking of the title against the property on the ground needs to be carried out much more carefully and precisely. In a larger property this can be quite a task involving the use of modern computerised surveying instruments using GPS technology. If the exact extent of the property is of vital importance, the surveyor may advise you to get the site checked by a specialist land surveyor or geo surveyor. If you buy a property on the basis that it has a particular area of ground and this is important you should ask the surveyor to do a careful check of the actual area.

**12. IF I AM BUYING AN APARTMENT IS THERE ANYTHING DIFFERENT TO LOOK OUT FOR?**

It is very difficult to know where to draw the line in a survey of an apartment. All that is for sale is the apartment itself, whereas most of the important information regarding the apartment depends on the structure of which it forms part and the common areas which it shares with other apartment owners. Normally the structure of the building is owned by the Owners' Management Company and you will only be buying the internal space, not the structural elements of the apartment. We are advised by experienced surveyors that they personally would not purchase an apartment without having had an opportunity of looking at the structure in general, and, particularly in relation to apartments in larger blocks, making an assessment of its facilities for escape in the event of fire. An overall look at the structure will give an indication as to whether there are any signs of structural distress or damage or of likely major future expenditure - such as that the entire outside needs re-pointing or that there are problems with the roof. In apartment blocks the presence of proper fire doors on apartments and on lobbies with operational door closers, fire stopping where service pipes go through floors, smoke evacuations systems and an operational fire alarm are very important. Solicitors do seek copies of the planning permission and evidence of compliance with building regulations but this is not a substitute for identifying matters obvious from an inspection.

**13. I HAVE HEARD OF A SURVEY, A STRUCTURAL SURVEY AND A CONDITION SURVEY. WHAT IS THE DIFFERENCE?**

The word "survey" is applied loosely to all types of surveyors' reports. Other words used to describe the same type of report are appraisals, assessments or investigations.

The expression "structural survey" is normally used to refer to the report on a building made by a structural engineer.

The expression "condition survey" usually refers to a survey carried out on a building at the behest of a developer who is going to carry on major building works on a building or site adjoining. It is usually carried out by a structural engineer and is backed up with photographs of any cracking or flaws found. The intention is that if the building the subject of the report is damaged by the adjoining building operations there is evidence available to show which defects were caused by the building work and which already existed. The expression condition survey is also used to describe a survey carried out on an existing property which is being leased where the landlord and tenant wish to agree and have a written record of its present condition. This is usually where a building is being leased and the prospective tenant refuses to take full responsibility for more than keeping it in at least a similar state of repair.

**14. DO YOU HAVE ANY FURTHER ADVICE IF I WANT TO CARRY OUT A MAJOR REFURBISHMENT TO THE HOUSE AND POSSIBLY EXTEND IT?**

This is an area where advice from someone with the necessary know how is essential. In a way it makes the survey easier because the surveyor just has to concentrate on the basic structural fabric of the house assuming that most other material matters will

be completely replaced. The right surveyor should have a good knowledge of planning and building regulations and know what changes and what extensions are exempt from the requirement to obtain planning permission and if planning permission is necessary what is likely to be allowed by the planning authority.

**15. YOU SAY THAT ALTERATIONS TO HOUSES ARE A CAUSE OF PROBLEMS. WHY IS THIS?**

A great many extensions and conversions to houses are carried out without professional help. We suspect that builders carrying on business in this area actively discourage people from concerning themselves with details such as planning, or building regulations with the result that many are carried out without the necessary approvals and often without the assistance of an architect or engineer. The result is that unauthorised extensions and conversions can be a source of considerable trouble on the sale of the property when they and their compliance with planning, building bye-laws or building regulations get scrutinised by professionals, often for the first time.

A distinction should be drawn here between problems with the actual building and problems with the paperwork such as lack of the usual paperwork certifying compliance with planning permission and building regulations.

Problems with the building can vary from the worst situation where the extension is so hopeless that the best thing to do is to demolish it completely, to the other end of the spectrum where the faults are small matters which can be rectified by the expenditure of a small amount of money.

Problems with the paperwork can usually be overcome if the building itself stands up to scrutiny but, again there is a cost factor in getting an architect to certify the works or perhaps to apply for planning permission to retain an extension.

**16. YOU ALSO SAY THAT ONCE OFF HOUSES ARE A CAUSE OF PROBLEMS. WHY IS THIS?**

The statistics of problem houses show that a substantial amount of serious problems arise with such houses. Once off houses tend to be built in rural areas by the owners by direct labour who usually employ tradesmen with specialist expertise to deal with different elements. The expertise of the persons who help in the constructions of these houses varies widely and the co-ordination of a person with expertise in building technology is sometimes lacking. Also many are built without the aid of any construction specialist such as an architect or engineer. The situation was improved over the years as lenders insisted on certification of foundations, block work and roof timbers by competent professionals at stages. New building regulations were introduced on the 1<sup>st</sup> March 2014. This was intended to ensure that it would no longer be possible to build a new house or carry out an extension to a house involving a floor area of 40 square metres, without having an architect, chartered engineer or building surveyor involved both in signing off that the design complies with the building regulations and, when finished, that the completed house does so as well. Most importantly it required the professional to prepare an inspection plan and to carry on inspections to monitor the building at the stages specified in the plan. We believe that this involvement of skilled professionals in the design and monitoring of the building of houses will improve building standards. However as a result of extensive lobbying by

the self-building industry the government allowed an opt out for once off houses or extensions to a dwelling. Self building is routine in rural areas and houses built under the opt out are unlikely to benefit from improved building standards. It remains to be seen if availing of the opt out will have any adverse affect on re-sale prices of houses which availed of this opt out.

**17. ONE HEARS OF PROBLEMS WITH CERTIFICATES OF COMPLIANCE FOR ALTERATIONS TO HOUSES? HOW DO THESE ARISE?**

Where extensions are built without professional help it is not unusual to find that they are not constructed in accordance with best building practice. If the owner extending his or her home is not getting a loan from a lender the question of getting an architect or engineer to certify that the extension or conversion does not require planning permission or has been built in accordance with approved plans does not usually arise until the house is being sold. Even if the owner is getting such a loan the question of certification often does not arise until too late i.e. when the work is nearly finished.

Problems with planning, building regulations and certification require careful consideration by a competent architect/engineer/surveyor experienced in such matters in consultation with a solicitor experienced in conveyancing. Whilst all professionals' certificates are qualified to some degree, the original designers' affirmations and opinions are by far the most authoritative; anything later is a much more subjective opinion based on far more restricted information and may be found wanting if tested.

**18. I HAVE READ ABOUT RADON GAS BEING A PROBLEM IN HOUSES. IS THERE ANYTHING IN PARTICULAR I NEED TO GET THE SURVEYOR TO ADVISE ON IN RELATION TO THIS?**

Radon gas is a naturally occurring radioactive gas. The gas seeps up through the earth and through the subfloor of homes. It cannot be detected by humans in the house because it has no smell or colour. It can however be detected by specialised equipment, but this takes time, currently three months.

Radon gas has been linked to an estimated 200 lung cancer deaths per annum and it is in the interests of anyone buying a house to have regard to it. Areas of high radon concentrations include parts of Wicklow, Carlow, Wexford, Waterford, Galway, Mayo and Sligo, but no county is completely free of it.

Since July 1998, builders have been obliged to install a membrane over the footprint of each new building. This is to prevent radon gas getting into the house from the ground. In addition they are obliged to provide for a means of radon extraction from the sub-floor (under the membrane) by means of a sump or sumps with connecting pipework to an access point outside the house. A post construction test for radon is strongly recommended.

If you are buying a site you should make sure that a radon barrier and the necessary sump or sumps and pipework are installed at the appropriate stage because it is just not practicable to retro-fit a radon barrier. If you are buying a house and intend to carry out renovations to it you should ensure to incorporate radon protection which is not an expensive job. Current practice is to install a radon sump plus mechanical ventilation from it. You or your surveyor should check the map available from the Radiological

Protection section of the EPA and find out whether the property you are interested in is in a high risk area. You should also ask the seller if he had the property tested for radon gas. You can apply to the EPA and they will carry out a radon measurement of a home for a modest fee. This can be arranged online. It involves having a small neat device a bit bigger than a match box in the house for three months and then returned for analysis. If the vendor had the house tested you should ask for a copy of the test results. In theory, if you are buying a house which was built since 1998, you should have nothing to worry about on the assumption that the builder installed the radon barrier properly with the necessary sump. However, there is no way of knowing quickly if the barrier is installed or effective because it will be completely inaccessible. A radon barrier can reduce radon gas by 99% but the reduction can be as low as 60%. The probability is that the only way of checking would be to have a radon test done but currently this will take three months. If you are buying a house and it is in a high risk area and neither you nor the vendor are in a hurry, you should consider whether you should make it a condition of the contract that a test be carried out and if the test is not well within the official safe levels for houses be in a position to withdraw from or renegotiate the deal. The reality is that this is usually just not practicable because of the delay factor. However any purchaser should seriously consider what it would cost to install a radon barrier and sump apparatus in a property particularly if they are carrying out any renovations. As soon as you move into a new house you should have it checked for radon gas.

**Rory O'Donnell**  
**January 2018**