

TECHNICAL BULLETIN FOR RESIDENTIAL SURVEYORS

STORM DAMAGE AND INSURANCE

STORM DAMAGE AND INSURANCE CHIMNEYS AND FLUES VERBAL REPORTING THE RED BOOK LIABILITY CAPS DOWN VALUATIONS BOILER PLUS

ISSUE 30 November 2018





THE TECHNICAL BULLETIN

FOR RESIDENTIAL SURVEYOR

Welcome to the Technical Bulletin for Residential Surveyors. This Bulletin is designed for residential practitioners who are members of RICS and/or the Sava Scheme.

Produced jointly by BlueBox partners and Sava here you will find technical articles, updates on convention changes and best practice. We hope you will find this useful in your day-to-day work and we welcome any feedback you may have and suggestions for future publications.



CONTENTS

STORM DAMAGE AND INSURANCE

CHIMNEYS AND FLUES HILARY GRAYSON BSC EST MAN (HONS) JOHN WHEATLEY BSC MRICS

VERBAL REPORTING

THE RED BOOK

LIABILITY CAPS

DOWN VALUATIONS

BOILER PLUS DR LISA BLAKE

STORM DAMAGE AND INSURANCE

WHAT SURVEYORS SHOULD KNOW

TECHNICAL TEAM, SAVA

This article explores how building insurance policies generally cover financial loss caused by storm damage and considers the implications for surveyors when reporting property defects and deficiencies.

Insurance Company Considerations

When assessing a storm damage claim, the insurance company will consider three main issues:

- 1. On the balance of the evidence, do they agree that storm conditions occurred on or around the date the damage is said to have happened?
- 2.Is the damage claimed consistent with what is generally seen as storm damage?
- 3. Were storm conditions the main cause of the damage? It could be that other factors were involved, and the damage might have occurred without the storm.

To answer these questions, they will take into account weather reports, the condition of the property, and information about the storm conditions in question.

Defining a storm

How do insurers define a storm and assess the damage caused by a weather event? For example, how is storm damage differentiated from accidental damage, which may not be covered? Building insurance policies do not necessarily define exactly what constitutes a storm. Rather, they are likely to say that a storm involves violent winds, and is usually accompanied by rain, hail or snow. However, there are circumstances where damage is caused to property by extreme weather events that do not include high winds. In these circumstances, will any damage be covered by the insurance policy?

Assessing a claim

Insurers may use the Beaufort Scale to justify whether they should meet a claim. This measurement tool categorises wind speed on a scale of 0 to 12. Insurers might say, for example, that only winds above a certain point on this scale represent 'storm force' winds capable of damaging a building.

When assessing a potential claim, insurers don't rely solely on the Beaufort Scale. They will also use weather reports for the alleged storm's timeframe to help assess the weather conditions at that time. While the weather station may not be the exact location of the damaged property, readings can still provide useful evidence for assessing the claim. Insurers will carefully consider all the evidence in each individual case to determine whether the loss claimed by the consumer was caused by a storm, or by another type of event.

Damage caused by alleged storms

Damage to retaining walls

If a retaining wall has collapsed during a storm, insurers will consider the primary cause for the collapse. Sometimes it can be caused by a gradual build-up of pressure behind the wall. This can be further aggravated by 'weep-holes' becoming blocked over time, by the lack of weep-holes at all, or by incorrect mortar repairs in older walls.

Most modern walls have weep-holes, but many older

Weep-holes prevent moisture from building up behind the wall. Water will look for ways to escape, and weep-holes allow moisture to escape, easing internal pressure and reducing the chance of the wall collapsing.

walls do not. Insurers would not consider a home owner at fault for not adding weep-holes to a wall that was built without them.

That said, if the insurer concludes that a wall has collapsed due to earth behind it becoming saturated over time, it would not be regarded as storm damage and the claim might not be honoured even if the storm event triggered the collapse. It should be noted that, this type of damage could be covered by other parts of a buildings insurance policy.

Damage to contents due to storm damage

Claims relating to storm damage can be made under a contents insurance policy.

Following a storm, water might enter a property through gaps in the roof tiles and damage contents. A consumer might then make a claim on their buildings cover for the damage to the roof, and on their contents cover for storm damage to their contents.

In this situation, insurers will consider whether the consumer was aware of the damage to their roof. If they think that they were not aware, they might uphold the complaint relating to the contents insurance claim, but could still reject the buildings insurance claim. For example, if they think that the primary cause of the damage to the roof tiles was wear and tear, rather than the identified storm, they won't uphold it.

Damage as a result of snow

Insurance claims for damage caused by a snow storm also occur. Snowfall might constitute a storm if high volumes fall over a relatively short period of time, and the snowfall is considered extreme. However, damage such as collapsing roofs and conservatories, is often caused when snow falls gradually over several days and the collapse is due to the weight of snow which has built-up over that time.

Here, insurers will look at whether the damage is consistent with a single event such as a snow storm or is more likely related to maintenance issues.

Case Study 1 from the Financial Ombudsman:

The claimant's conservatory was damaged by snow. The claim was based on the fact that the damage was caused by heavy snowfall over a period of days, which the claimant believed constituted a 'snow storm'.

However, his insurance company rejected the claim on the basis that the damage was not covered as an insured event, such as storm damage although it did concede that the claimant could have claimed under accidental damage. Unfortunately, he had not taken out this type of cover.

The Financial Ombudsman supported the Insurance company in this case. While there had been a significant amount of snow on the roof of the conservatory before the damage had occurred, they felt this was snow that had built up gradually over a period of days. Consequently, it was not a 'one off extreme event' that would constitute a storm.

The condition of the property

Both insurers and the Financial Ombudsman, if the case is subsequently referred to them, will also consider the condition of the property at the time the storm damage is said to have occurred.

For example, when investigating a claim for a flat roof said to have been damaged by a storm, they will decide whether the roof was in a poor state of repair before the storm. If they think this would (or should) have been clear to the consumer, then they are unlikely to uphold a complaint against the insurer for declining a claim for storm damage. Many insurance policies exclude damage caused by wear and tear. Some also exclude damage caused by gradual deterioration or gradually operating causes.

Another example would be where a consumer claimed for damage to their pitched roof following a storm - but the roof tiles already appeared to be in a poor condition before the storm. Insurers would carefully consider whether the roof tiles would have been displaced regardless of the storm - or whether they were in a good enough condition to have remained in place for some time, had it not been for the storm. If they decided that the roof tiles would have been displaced regardless of the storm, they are unlikely to settle the claim. But if they think it is likely that the tiles were in a good enough condition to have remained in place if the storm had not happened, they may settle the claim.

Accidental damage

Sometimes, an insurer will decide there was no storm

damage, or that the buildings were so poorly maintained it was reasonable for the insurer to decline a claim for storm damage. However, the consumer may still be able to claim for some of their losses under the accidental damage section of their policy, if there is one.

Accidental damage cover is usually sold as an optional addon to standard household insurance policies. Insurers often say it is designed to insure the policyholder's possessions against damage caused by acts of negligence, which could include spillages and breakages in the home.

Defining accidental damage

A policy should define "accidental damage". Where it does not do so, the Financial Ombudsman will usually apply "ordinary, everyday meanings". Generally, this will be something both unforeseen and unintentional.

They also say that a "reasonable interpretation of the word damage" includes not only physical damage to an item but also something that resulted in a "loss of function" or to put it another way, left it unable to perform the task it was designed to do. For example, a blocked drain could be considered as 'damaged' - even if there was no physical breakage or visible trauma, because the drain isn't working how it should.

Some policies clearly define what they mean by 'accidental damage'. Typically, damage must be: "sudden and as a result of an external, visible and violent cause".

If a policy has defined accidental damage, then the Ombudsman will, in the event of a claim being referred to them, look at how the definition was communicated to that policyholder. They are likely to uphold a complaint if:

- the policy defined accidental damage as something significantly different to the ordinary meaning of the words,
- the policyholder's attention was not adequately drawn to the unusual definition,
- the policyholder would probably have acted differently, and been in a better position as a result, if the definition had not been significantly different to the ordinary meaning.

So, if an unusual definition is mentioned solely in a policy document or in the renewal literature, this is unlikely to be considered as enough to bring it to the policyholder's attention.

When might accidental damage apply?

Insurers might not honour a claim for damage where it is found to be caused by:

- wear and tear,
- the gradual deterioration of something with age,
- wilful or deliberate acts,
- defective workmanship.

Case Study 2 from the Financial Ombudsman

The claimant's roof became damaged and their insurer agreed the damage had occurred following a storm. However, it refused to cover the full costs of repair because the nails securing the roof slates were worn out. This 'wear and tear' was excluded under the policy.

In this particular case, the Financial Ombudsman was

made aware by the insurance company of a phone conversation between a representative of the insurers and the claimants. This conversation mentioned that a contractor had visited the claimant's house and noted that the nails securing the roof slates had rusted. However, the insurer could not provide a recording of this phone conversation or written confirmation from the contractor in question.

With the insurer's agreement, the claimants instructed a second contractor to inspect the damage to the roof. This second contractor's report indicated that the damage to the roof had occurred because of the storm and did not mention any wear and tear contributing to the damage.

The Financial Ombudsman decided the balance of evidence suggested the cause of the damage was the storm and told the insurer to reconsider the claim and to pay any settlement due to the claimant.

What are the implications for surveyors?

We know from experience that many consumers see the surveyor as 'the low hanging fruit' when they are aggrieved following the purchase of a property or when they have a significant repair bill.

We are not aware, however, that any research has ever been carried out to determine how defects come to light in the first place. We know of no statistics to suggest what proportion of complaints or claims are made against surveyors because buildings or contents insurers have not met a claim.

That said, we must acknowledge that an investigation following an insurance claim is very likely to uncover any defects or deficiencies present - and this potentially implicates surveyors. If a surveyor attended that property on behalf of the new owners to undertake a buyers' survey and failed to pick up that underlying problem, then, as we know, there is the potential for a PI claim.

As we see more extreme weather events due to climate change, claims against buildings insurance policies will increase. It therefore makes sense when inspecting a property and reporting to clients, that surveyors should consider how the elements will behave in extreme weather when determining condition ratings.

For more information on storm damage and potential repercussions for surveyors, see financial-ombudsman.org.uk

CHIMNEYS AND FLUES

DEFECTS AND HOW TO REPORT ON THEM

HILARY GRAYSON BSC EST MAN (HONS) DIRECTOR OF SURVEYING SERVICES, SAVA JOHN WHEATLEY BSC MRICS CHARTERED BUILDING SURVEYOR, BLUEBOX PARTNERS

Hilary Grayson looks at the evolution and construction of chimneys and flues and the type of defects which can arise. It covers obstacles presented to the surveyor with additional comments from Chartered Building Surveyor, John Wheatley, regarding hygroscopic salts and damp on chimney breasts.

Virtually all houses built before the 1960s would have had a chimney. With an increase in gas fires and central heating and the labour involved with lighting and cleaning open fires, the open fire place and chimney became redundant. As a result, many properties were 'modernised' after the 1960s by removing or bricking up fireplaces and removing the hearths and fire surrounds. Houses and flats built after this time were usually built without fireplaces and flues at all. However, there has been a revival of the traditional fireplace and surround, both for ornament and as a supplementary form of heating. If a homeowner has ambitions to 'open up' a previously bricked up fireplace, reinstate an open fire or install a wood burning stove and they run into problems, they could take their frustrations out on the surveyor who carried out the pre-purchase survey. In this article, we look at flues and chimney breasts

and at some of the things that can go wrong.

Evolution of the chimney

Early homes relied on a wood burning open fire as the sole heating source. This would usually consist of a plain stone hearth and vent through a hole in the roof or wall. Where the vent was through a roof this was sometimes covered by a louvre to stop the rain getting in. Chimneys were not widely adopted until the Tudor period, and even then, only by the upper classes (a good example of the early chimney stacks are those at Hampton Court Palace) while more domestic buildings still dealt with smoke-filled rooms.

During the 16th century timber supplies were not so available, and coal became a more commonly used fuel. As coal smoke is toxic, more sophisticated ventilation was required, and the chimney became more commonplace. Early chimneys were not particularly efficient and were often very dangerous, as their construction from wattle and daub was susceptible to fire. Following the Great Fire of London in 1666, further changes to chimney construction were made. By the early 1700s all clay-built chimneys in England were ordered to be rebuilt in brick.

However, a poor understanding of combustion toxic gases meant that chimneys were still inefficient and significantly contributed to air pollution over the increasingly industrial cities. By reducing the size of the fireplace, introducing angled sides to reflect heat back into the room, and restricting the flue size to increase airflow, efficient fireplaces and grates were developed.

This new, improved fireplace could be built inside the large and inefficient fireplace openings that already existed. For new installations it could be incorporated into the wall. It's only recently that small, comparatively efficient, coalburning grates and fireplaces were developed. This is the type of fireplace commonly seen in Georgian, Victorian, Edwardian and early 20th century houses. Some were quite ornate, with beautiful tile panel inserts, which were replaced by tiled fire surrounds in the 1920s and 1930s. These continued to be popular until the demise of open fires in the 1960s.

Construction of the chimney and flue

The chimneys most surveyors will find are in houses dating from the late Georgian period up to the 1950s. The fireplaces, chimney breasts and flues will usually be of brick construction. Even in a stone wall the chimney itself is likely to be of brick because of its durability and flexibility. Most chimneys were built at the same time as the walls and the brick flues were usually the standard length of a brick internally (225mm/9").

Chimney flues can be complex. For example, a 'mirrored pair' of houses share one chimney stack, but each house could have four open fire places. This would mean eight flues ultimately emerging at the chimney stack. It was quite an art for the bricklayer to connect the right flues to the right fireplaces and make sure that they all avoided each other. For this reason, flues in older properties rarely run in a completely vertical line from bottom to top. Usually the flues will be off-set at some point to avoid the fireplaces on the floors above.

The thin walls between the flues in a single chimney are called 'withes'. Where a flue has to 'bend' to follow the direction of the chimney or allow for another fireplace in the room above, the bricks in the 'withes' will be stepped or 'raked'.

If the brick work was of good quality then the outer chimney wall will be one brick thick, but half brick thick is by far the most common, since the vast majority of terraced Victorian housing we are used to seeing in British towns was 'housing for the masses'. In houses built since the introduction of the 1965 Building Regulations, all flues must be built with liners during their construction. These will usually be clay liners, which should last the life of the building.

Prior to 1965 construction was controlled by locally accepted good practice or local byelaws. This means that there can be local variations. Prior to 1965 flues were usually rendered on the inside. This was called 'parging' and would have been with a lime mortar.

Downsides of burning coal

Burning coal causes many problems due to the gases released during combustion. Traditional lime render used in flues was not air tight and affected by the acids and tars produced during combustion, causing it to gradually deteriorate. This leaves the flue in poor condition, often leaking fumes or tars into the walls or other parts of the building. Despite the building regulations, houses built after 1965 can suffer similar problems due to badly installed flue liners. Cracked flue linings can eventually fail, causing render to fall down the chimney leading to rubble in the fireplace.

The acids and tars produced by burning coal can also affect the bedding mortar between the withes. This causes bricks to loosen and sometimes crack. If bricks within the withes are displaced, flues are no longer properly separated and can develop smoking and downdraft problems. Chimney sweeping can also cause damage to bricks, particularly if they have been loosened due to burning coal.

Hearth construction

If a chimney will be used as an open fire or a stove, then the hearth should be made of suitably robust materials. It should also be at an appropriate size to protect the rest of the building. Sometimes fireplaces were removed, and hearths left in situ. You'll also find some were altered to make the floor area flush with the newly bricked up chimney opening.

See Document J in the Building Regulations for more information on how to reconstruct an old hearth for reuse.

Challenges for the surveyor

More recently, there has been a resurgence in open fires. Some new houses are now built with at least one working fireplace and a wood burning stove is often described by estate agents as a 'feature' of a property.

Therefore, surveyors must understand how flues and fireplaces work and be aware of the issues that a homeowner might have to address if they wish to reinstate an open fireplace or install a stove. Many surveyors report that they are often asked by the purchaser to look at the practicalities of opening sealed fireplaces and reusing redundant flues, when conducting building surveys or condition reports. This is supported by the use of the Sava Fact Sheet on woodburning stoves. It is one of the more popular and many surveyors use it to provide their clients with more generic information. You can download the factsheet from Sava EDGE here.

Assessing the inside

When a surveyor inspects a building, they won't be able to accurately assess the inside of the flue. If a fireplace is open and accessible it's sometimes possible to look up the flue, but often it's blocked off to prevent drafts and keep the room warm. A 'clean' fireplace does not necessarily mean that the flue is relatively intact.

Ventilation and rainwater

Removing the original fireplace can also lead to other problems. The old-fashioned open fireplaces provided efficient ventilation, which is essential to remove toxic coal gases. Even when the fire was not in use the flue would promote air movement and ventilation - warm air rises and so would rise up the flue and escape through the chimney. While not desirable in terms of energy saving, this would have reduced condensation.

Other problems caused by flues include rain getting in to the open top. If a fire is lit regularly, then this is not a problem as the heat will keep the chimney dry. However, if fireplaces are sealed up, there's nothing to stop rain entering the top of the flue. Without the warmth from a fire, the resulting dampness within the chimney can be a problem. To prevent this, a suitable terminal should be fitted to the top of chimney pots of disused fireplaces, which stops the rain but allows ventilation. If chimney pots have been removed altogether, this could be a sign of careless work when the fireplace was decommissioned and should alert the surveyor to other potential problems in this area.

Ventilation to the flues within the building is also necessary so that air can still enter the bottom of the flue and escape through the terminal on the stack above. When carrying out an inspection it is essential to check that any redundant flues are fitted with suitable terminals at roof level and also make sure that the flues are ventilated inside the house.

It's also possible that the chimney could have been removed completely below roof level while the stack remains within and above the roof. We all know about Smith v Bush and it is not the intention to consider that case in depth here, suffice to say that if a chimney breast is missing, it is essential that the surveyor follow the trail and try to determine, if possible, that the chimney above the missing element has been supported properly. This is not always possible, particularly if the ground floor chimney breast has been removed.

Managing clients expectations

Client expectations can be difficult to manage, particularly when builders and other parties later inform them that: "your surveyor should have spotted this".

It's important, where possible, to speak to the customer before the survey takes place. Ask them about the fireplaces

and whether they have any specific ambitions. However, this isn't always possible, and clients may not yet know what they want to do with the property. It can't be assumed that just because they do not have plans prior to purchase, they will not open an enclosed fireplace later on.

Potential queries

The following are some examples of complaints or queries that could arise post survey: -

- Rubble in a fireplace
- Fireplace is damp
- Unexpected costs of relining a flue or rebuilding a hearth
- Hearth present is not suitable
- Draughts from the chimney

Clearly, surveyors don't have x-ray vision, but it is possible to inspect, record and report in such a way that pre-empts future problems.

The following precautions can help address queries at a later date: -

- Where chimney pots have been altered or removed, follow the trail to find out why.
- Where flues are redundant, consider if the terminals at the pots are enough to stop water getting in.
- Photograph and mark on a floor plan any furniture that is obstructing a chimney or fireplace, whether blocked up or not.
- If an electric or gas fire has been installed, make a clear note and take photographs. If it is a gas fire, you also cover it under 'gas appliances'.
- Use your moisture meter around the base of the chimney breast in all rooms, remembering that all flues would have been built separately. If the fireplace has been blocked up, is it sufficiently ventilated?
- Remember that flues may have bends to accommodate fireplaces above, and dampness can accumulate on those bends - so be alert for signs of damp higher up the chimney breast.

In your report include the following:

- Highlight any alterations for further investigation have building regulations been sought and approval given?
- Make it clear what can't be inspected, and why. This could include flues, closed fireplaces, fireplaces blocked with furniture etc.
- Make it clear that testing the flues is beyond the scope of inspection.
- Make it clear that even if you cannot find anything of concern on the day of the inspection, this does not mean that the flue is in good repair.
- Make it clear that a flue in bad repair can impact on the health of occupants by leaking carbon monoxide into a room.
- For terraced properties, make it clear that the flues will share a chimney with the neighbouring property.

Note on Hygroscopic Salts

Chartered Building Surveyor, John Wheatley says: "It is very common to find that 'damp' on chimney breasts relates to salt contamination of the plasterwork, effectively causing condensation hot spots. The by-products of coal combustion react with chemicals in the masonry to form 'hygroscopic' salts, which means that they can absorb water from their surroundings.

"I have a good example in our en-suite bathroom. We took down the chimney stack when extending our home but retained the chimney breast as a service duct. The face of the breast was finished with plasterboard on dabs. The plasterer was asked to incorporate salt retardant in the dabs. Around 12 years later, we noticed one small patch of damp every time the shower went on. It disappeared when the humidity dropped back to normal.

"My working assumption is that one of the dabs has no retardant and, over time, the salts have leached through. This has caused a condensation hot spot when the humidity levels are high. Six years on, it comes and goes with no real consequence other than a red-faced surveyor and a slightly tutty wife. This would be difficult to spot for a surveyor as it's not immediately apparent that the service duct is an old chimney breast from the 1920s, and the damp patch isn't visible most of the time.

"However, it does give a reading on a moisture meter as the salts are conducting, and as we all know a moisture meter isn't a moisture meter at all - rather it simply records where there is a material that can conduct an electric current."





VERBAL REPORTING



A KEY SKILL FOR SURVEYORS

JOHN WHEATLEY BSC MRICS CHARTERED BUILDING SURVEYOR, BLUEBOX PARTNERS

Experienced Chartered Building Surveyor and technical trainer, John Wheatley, explains why verbal reporting is so important for clients and our reputation as surveyors.

Discussions between surveyors and their clients are invaluable. It's an opportunity to demonstrate how seriously you take the client's interests, and how thoroughly you've undertaken the inspection. These interactions can be the most direct form of marketing you can get, as well as the best protection against future misunderstandings and complaints.

A sympathetic and professional practitioner will almost certainly be recommended to friends, family, and colleagues, while the distant, aloof, and incomprehensible may well be in the firing line if problems arise.

Key skill for surveyors

Verbal reporting is therefore a key skill for surveyors. Despite this, there is little available guidance on the subject.

While experienced practitioners will have developed their own styles and approaches over the years, training exercises with newer entrants to the profession, suggest that it's one of the trickier skills for people to master. Many trainees struggle to verbalise the range of issues that typically concern clients and to respond appropriately to commonly asked questions.

What's required of surveyors?

While the agreed terms and conditions should outline the requirements for the level of service and report being undertaken, this is often vague when it comes to verbal reporting.

A good starting point is the RICS guidance note "Surveys of residential property" 3rd edition May 2016 reissue. This offers guidance on the benchmarking standards for survey products and references level one, two and three surveys.

Most practitioners are familiar with the RICS level one survey, "RICS Condition Report", level two survey "RICS HomeBuyer Report" and level three survey "RICS Building Survey". The practice notes and professional statements set the required standards, but those covering the Condition Report and the HomeBuyer Report don't specify requirements for post inspection verbal reports. The Building Survey standards require surveyors to do their best to make clients aware that they can discuss the report after it is produced, as well as discuss matters before inspection. This could be taken to imply that there is no expectation that a verbal report will necessarily be given, certainly for level one and two reports but that we're there if needed at level three.

More communication needed

However, the guidance note does suggest more is required. Section 7, 'post report delivery and managing client expectations' suggests that: "many clients will want to discuss what could be the largest purchase of their lives. Consequently, surveyors should set aside adequate time to do this".

This appears to cover all three levels of survey and to imply an element of verbal reporting is anticipated. Either way, most practitioners know that surveys should involve some verbal reporting, and that clients expect it from their professional advisers.

Key advice for discussions

The guidance note suggests that these discussions are likely to take place after the report is delivered. Three key points of advice are also given:

- The status of the conversation should clearly be explained at the beginning of the conversation.
- Verbal advice should not extend beyond the written terms and conditions.
- The conversation should be recorded in writing and attached to the file notes for storage.

Before or after the report?

Whether the post-inspection verbal report is given before or after the written report has been seen by the client, is up for debate. Either way, the guidance notes say that before confirming instructions, surveyors have a responsibility to ensure the client is choosing the most appropriate survey and understands the key elements of the service. This also allows the surveyor to understand the client, their particular concerns and how they intend to use the property.

RICS guidance comes with explanatory sheets outlining the service as well as the Home Surveys Information Sheet (HSIS). For level one and two surveys, it is accepted that these tasks may be undertaken by suitably knowledgeable and trained support staff, but at level three direct communication between the surveyor and the client would be most appropriate.

As a sole practitioner for most of my surveying life, I preferred to give a verbal report before writing the report. Many more will, I suspect, be more used to undertaking these after delivery of the report, as indeed the guidance notes infer. I'm certainly aware of practitioners that prefer to talk to the customer before the inspection, carry out the inspection, produce the report and then phone the customer to discuss any concerns they may have. No doubt there are many variants on this approach out there. I find that giving the client a flavour of the report before they're faced with reading and processing a weighty report is best. I have varied this when initial discussions suggest, for example, a trickier than average client.

Personalising the report

Discussions at an early stage give the surveyor an understanding of how much a particular issue is bothering a client. If surveyors have this information before writing the report, then there is an opportunity to personalise it with an added focus on those issues. This makes it easier to produce a more bespoke report. Referencing a point of discussion will make a client feel valued at all report levels.

Rarely, the client may decide not to proceed after hearing the verbal report. You may therefore have gained them valuable time in pursuing other options and possibly avoiding additional costs.

Caution

Chatting before the report is written and read can bring its own problems. It could distract from key points in the report, and potentially suggest that those issues not specifically discussed are of little importance. It also tends to be more time consuming at the outset, although in my view can certainly save time later.

While some may feel that the client may be on the back foot if they haven't had time to read and digest the whole report, this can be mitigated by offering follow on discussions if necessary. The property is also clear in your mind and you're less likely to be responding to questions days or weeks down the line. In my view, this is an important part of providing a quality service.

I believe this approach shows surveyors as professional and proactive.

Tips for better verbal reporting

Here are some tips for better verbal reporting. These are typically highlighted to trainees undertaking verbal reports for the first time:

Before you pick up the phone

- 1. Run through your notes and give yourself time for reflective thought on the property.
- 2. Make a list of key points you want to discuss with the client.
- 3. Consider whether you are able to provide a verbal report at this stage. For instance, you may not yet have made all your enquiries of the agent, or the location, your thoughts on value may not yet have crystallised. In this case, you may have to resist pressure from the client to call them asap. Remember that what you say first will probably stick in the client's mind and could be difficult to dislodge.
- 4.Care must be taken when meeting clients at the

property. There is a big advantage in talking face-toface but could also be caught on the hop when thoughts aren't yet fully formed. Many surveyors avoid this, but for level three reports I've found it really helps clients put your comments in perspective. It is absolutely crucial to stress that the written report takes precedence.

5. Check the instructions to ensure that no additional services beyond the standard terms have been agreed. This should have been done before your inspection, but double check.

Your opening shots

- 1. Check your contact numbers, confirm that who you are talking to is your client. Numbers for vendors and clients can get confused, and there have been instances where verbal reports have accidently been given to the vendor! (not good, a schoolboy error, I really should have known better!)
- 2. Introduce yourself, be friendly and check that now is a good time to talk.
- 3. Give a rough estimate of how long you anticipate the conversation taking.
- 4.Explain at the outset that the purpose of the call is to give an overview and that it will be limited to the main issues and concerns. Explain that the details will be confirmed in a written report and that this takes precedence.
- 5. Give an estimate of when they can reasonably expect to receive the report.
- 6. Explain that you are required to confine your comments to the terms and conditions of the service that you are undertaking (i.e. Condition Report, Homebuyers Report, Building Survey etc.).
- 7. Be confident and speak with authority.

Your comments

- Open with something positive if possible. Your client could be anxious about what you're about to deliver. Inevitably most of a surveyor's focus tends to be negative. If there is a feature of the property that your clients particularly like, this should be respected. However, if you have serious concerns about the wisdom of continuing to purchase, you need to be careful not to tell them what they want to hear, but rather you must focus on the message you need to get across.
- 2. Explain the structure of the call. This should help avoid the client jumping in and taking you off at a tangent. You don't need to go into detail about the materials and construction, as these are in the written report.
- 3. Be clear on whether further reports will be advised. Explain that as surveyors we can't undertake tests, and that unless recent certificates are available, further reports are always recommended.
- 4. Your client will nearly always want to know your view on value and will often ask whether they should be negotiating on the sale price for certain items. If your valuation hasn't been finalised, you need to explain this and don't be drawn in further. Explain the report will give a market value that reflects the apparent condition

from a visual inspection at the time of inspection, but that this could change once any further investigations recommended in the report have been commissioned or estimates obtained and that certain issues may only come to light once the property is vacated. Explain that we don't get involved in negotiations.

- 5. You will get asked: "would you buy it?" countless times. The answer has to be: "I'm afraid I can't answer that". As the interpretation of concerns or defects is inevitably subjective, it's a question that you must politely duck.
- 6.Don't discuss the likely costs of repairs unless this has been agreed as an additional service. Explain that obtaining quotes for all works prior to a commitment to purchase is advised.
- 7. Don't discuss alterations or extensions proposed by the client unless additional terms have been agreed. Explain that this advice is beyond the terms of reference and where they can go for further advice. This could include a local building surveyor or architect, the local authority or the Planning Portal web site etc.
- 8. Avoid discussing condition ratings if you haven't yet dictated the report.
- 9. Avoid recommending contractors for works, although you can point them towards certain federations. For example, the Property Care Association, Wood Protection Association, HETAS, Gas Safe, NICEIC, ECA, OFTEC, among others.
- 10. Finish by explaining that when they have read the report, they are welcome to give you a ring to discuss any further concerns.
- 11.Crucially, make a record of your conversation. Use your checklist to keep on track, but also record any additional items discussed and attach these to your site notes for subsequent filing. Remember duties and liabilities apply to verbal advice as well as written.

Varying expectations

Client needs and expectations vary. The written reports we produce tend towards a 'one-size-fits-all' approach. A scan of review sites and blogs suggest that many clients regard these kinds of reports as confusing, overly defensive and of little genuine use to them. Of course many satisfied clients never trouble such sites, but opportunities to enhance our reputation should be taken if one conversation I overheard is anything to go by. It was some years ago and involved me joining a conversation between my wife and an acquaintance who later became a friend. It went something like this:

Friend: (talking to my wife about a problem with their house)
"Surveyors, they're all just legalised thieves aren't they?"
My Wife: "Oh by the way this my husband John"
Friend: "Hi John, what do you do?"
Me: "Mainly thieving!"

Verbal reporting is a key opportunity to ensure the service we give is of real value to that individual client and to improve our reputations as professionals. You can find an example checklist for a successful verbal report in Sava EDGE here.



(EY DATES

NEWPORT, WALES

COLDRA COURT, NEWPORT 31ST OCTOBER 2018

MILTON KEYNES

KENTS HILL, MILTON KEYNES 1ST NOVEMBER 2018

LAKESIDE CONFERENCE CENTRE

YORK

NOTTINGHAM

EASTWOOD HALL 14TH FEBRUARY 2019

28TH NOVEMBER 2018

DIPLOMA BRIEFINGS

Join us at a Diploma Briefing to find out about life as a residential surveyor and how the Diploma in Residential Surveying and Valuation trains you to become a competent AssocRICS Surveyor in 24 months.

Southampton, Wednesday 7th November, 10am - 12.30pm Holiday Inn, Eastleigh, Hampshire, SO50 9PG

Nottingham, Wednesday 5th December, 11am - 1.30pm Eastwood Hall, Mansfield Road, Nottingham, NG16 3SS

www.sava.co.uk | hello@sava.co.uk | 01908 442 158

THE RED BOOK

RECENT CHANGES AND WHAT THEY MEAN FOR YOU

FIONA HAGGETT BSC (HONS) FRICS OPERATIONS DIRECTOR, BLUEBOX PARTNERS

The RICS Valuation Professional Standards (Red Book) has long been the backbone of valuation, first in the UK and now globally. The Red Book provides a framework, within the rules of conduct, to ensure that users can be confident that the valuations they instruct are consistent, transparent and produced in line with international valuation standards. Fiona Haggett looks at the changes for 2018.

Global Red Book update

The Global Red Book was updated in 2017. For residential valuers the changes were not huge, but included:

- A formal recognition that oral advice comes under the Red Book requirements (PS1).
- Recognition of the new global Ethics Standards and International Property Measurement Standards (PS2).
- A requirement to specify valuation currency and any limitations on liability that have been agreed in the terms of engagement and report (VPS 1 & 3).
- A requirement to choose the appropriate valuation method for any job and to be able to justify and explain this choice (VPS5).

UK Red Book update

It's now the turn of the UK supplement to be reviewed.

The draft document has been through the consultation process and is scheduled for publication at the end of 2018. For context the UK Red Book sits beneath the global version and is intended to set out the implementation of the Global Valuation Standards in a UK context.

RICS also intend to produce additional Jurisdiction Guides to support the Global Red Book. These documents will explain the adoption of standards in each global market and to cover regulation of the standards. The publication date for the UK Jurisdiction Guide hasn't been announced.

Proposed changes

The draft UK Red Book supplement shows that there are a number of proposed changes, particularly within valuation

for secured lending.

Firstly, RICS have added a commercial valuation for secured lending protocol. This used to be part of the Red Book but was removed some years ago. The industry felt a need to reintroduce certain standards specific to this sector. This is a short section, covered in the new VPGA7.

The residential secured lending standards have also undergone a number of changes. They have been pulled together into one main section of the Red Book (VPGA8), supported by VPGA 9, which covers associated items (for example, HBR).

The residential standard starts by defining the role and remit of a valuer in a secured lending context as follows: *"... to advise the lender on:*

- the nature of the property and factors that are likely to materially affect its value that are revealed during the process and/or inspection
- the market value (and/or market rent if required), with specified assumptions or
- (exceptionally) special assumptions and
- risks associated with the property that may have a material impact on its value".

The remit is defined as follows:

"...to provide an objective valuation opinion having regard to the lender's policy and requirements. Decisions on mortgage term, size of advance and lending outcome are a matter for the lender, though the valuer may highlight and report on specific risks, particularly if these are likely to have a material effect on value or are likely to prove critical to a lending decision."

The standard also clarifies that the remit is also as defined by the terms of engagement or terms of reference and that parties cannot rely on any terms outside the contents of the agreement.

Assumptions and special assumptions

The role and remit of the valuer carries through to the section on assumptions and special assumptions (UKVPGA 8.5). Here it is specified that, in an absence of information, a valuer is expected to make: "verbal enquiries of an owner/ occupier or selling agent regarding any elements of the property that may have an impact on value".

This makes it clear that an automatic or default reliance on standard assumptions as laid down in VPGA8 (previously UK Appendix 10) is not acceptable and that professionals must make some effort to establish details before providing a valuation figure. The standards then clarify further, by stating that there is no duty for a valuer to read the full lease, search for statutory notices or to purchase data from a third party. In doing this, they look to prevent a 'creep' of lender expectations on limited inspection and valuation.

Changing industry

VPGA 8.3 addresses the changing nature of the industry by providing expectations around the increasing number of valuations that are now completed without a full inspection. It is made clear that lenders must understand the consequent risks and limitations to liability that such a valuation produces, and it looks to ensure that such reports are not onwardly disclosed by lenders.

The final big change is to the basis of value formally known as PMV (Projected Market Value). This has been much misunderstood over the years and has been often misused as a forced sale valuation. PMV has always been a market value with a 'special assumption' of sale at a specified date in the future. In other words, a numeric indication of short-term market trends. The new UK Red Book seeks to address this by redefining (or removing) PMV, though the draft version was inconsistent in its approach. This should be fully clarified in the final document.

Residential valuers must be fully aware of the changes to the UK Red Book and acquaint themselves with the revised requirements when it is published later in the year. If there is one overriding message that comes out of the draft document, and associated guidance under development, it is that no valuer should default to special assumptions without first making a reasonable attempt to establish the facts. This is surely something that we, as professionals, would always look to do.



ASSESSORS WANTED FOR SURVEYING QUALIFICATION

- You must be an experienced residential surveyor and valuer
- You must be a member of RICS
- No prior assessment experience needed as full training and ongoing support will be provided
- ✓ We currenty pay £1925 for each candidate assessed

Call the Training Team on **01908 442240** or email **training@sava.co.uk** for an informal discussion today.

LIABILITY CAPS

WHAT ARE THEY AND HOW DO THEY WORK?

MARION ELLIS MRICS CCXP, FOUNDER, INSPIRINGCX

Founder of InspiringCX, Marion Ellis MRICS CCXP explains how liability caps affect clients.

In May 2016 RICS issued revised guidance for residential valuers and surveyors in the Surveys of Residential Property 3rd edition. The guidance provides a clear, flexible framework for practitioners to develop their own services and, in particular, on the use of liability caps.

Recommendations were made to limit surveyors' liability to third parties wherever possible, following the publishing on an independent report by Dr Oonagh McDonald, Risk Liability in Insurance Valuation Work in January 2103. But are these recommendations being used in practice?

What is a liability cap?

A liability cap is intended to limit the amount a client or third party can request in the event of a claim. Many surveyors who weathered the collapse of the property market from 2008 (and some earlier in the rollercoaster 1990s) would agree on a need to protect businesses and claims liability. Liability caps and excesses are used regularly in other industries, so it seems logical to apply them to residential survey and valuation.

How does it work?

Contracts with Lenders or other larger organisations are

usually overseen by lawyers. The type and level of liability cap will be taken into context given the risk of the work being undertaken, and the appetite of the parties to work together.

Generally, they will either be agreed, not agreed or a mutual figure reached. As long as the liability cap has been through due diligence, it can be said that it has been reasonably debated. This would satisfy any professional indemnity insurance requirements, depending on the terms.

However, implementing such a clause in a contract between businesses is very different to formulating a direct contract with a member of the public, particularly when considering a defect claim.

Our reputation as surveyors

The majority of house moves occur in the wake of major life events, such as births, deaths, marriages and divorce. It could be argued that many clients in these positions are more vulnerable and are reaching out for a surveyor's professional specialist advice and support, which is why the RICS has a Royal Charter for acting in the best interest of the public. The reputation of residential surveyors inspecting properties for purchase fluctuates. While the RICS 2013 research showed that the advantages of getting and acting on a survey before buying a house saved homebuyers an average of \pounds 5,750. Five years on, this research is now dated, and media coverage of poor service and missed defects damage the sector's reputation.

Some firms are finding that defect claims are on the rise, due to a reduction in the valuation claim confetti letters of the past, improved governance of valuation methodology and better use of technology when it comes to comparable evidence. It also reflects the type of work now carried out by some surveyors.

Reasonable clauses only

Inserting a liability cap into the terms of engagement with a client must be considered. If not, it would be unenforceable, as it must comply with the Unfair Contract Terms Act and the Unfair Terms in Consumer Contract Regulations.

Brief research into surveyors with their terms displayed online show just how poorly the liability caps are being demonstrated to clients. Often cited at 20 to 30 times the fee paid, one example states: "For example, if you paid £100, our maximum compensation that we are obliged to pay you would be limited to £3,000."

The question is, is this enough and does the client understand? Liability caps have been tested in court but not in any significant case relating to a property defect following a survey.

Calculating liability

A better way might be to calculate the liability in the terms relevant to the client. For example, a £400 fee at 30 times would be £12,000. Terms do not need to be standard and it is possible to easily tailor letters and terms to help explain such matters to clients.

Larger claims could also be considered on their individual merit and therefore be much less aggressive from the outset. As in reality, when things go very wrong and the extent of a defect claim is significant and sensitive, would a liability cap of £12,000 on a much more expensive claim be applicable? There is clear, established law that terms will only be enforceable if reasonable, and in consumer contracts, the unequal bargaining positions of the parties are likely to mean that they will be construed in favour of the consumer, particularly where the cap is far short of the actual loss.

Either way, it's important that surveyors remember the business we are in. Clients come to us for professional advice and reassurance, and it is therefore vital that clients feel they understand not just the scope of a survey, but also the risks and benefits of an often-visual noninvasive inspection. It is also important to understand that they can ask questions and talk to surveyors if they are unsure before they commit to purchase.

By creating an open and positive connection with your client, rather than a defensive approach due to the fear of being sued, it makes our job easier. To do this, surveyors must create the opportunity to connect with their clients. This can potentially prevent some post completion claims occurring and establish a better relationship with your client. After all, house sales do fall through, and clients will return if they feel they have had good advice and support.

How to connect with your client

- Simple courtesy a friendly welcome and thank you for your business is often missed, and yet is so powerful. This is particularly important if the request for a survey was received through a third party.
- Communication before your inspection this doesn't always happen. Clients play a part in the agreed terms and should be asked to discuss the property with the surveyor as part of the agreed terms at a convenient time before inspection. These conversations often highlight early warning signs that can prevent aborted appointments and expectations of what the survey will provide and can be used for.
- Understand motivation buying a home is exciting and surveyors can maintain that experience by finding out more about why the client is moving, why they want/like the property and the timescale they would like. This can help you tailor your service to make it more personal.
- Personal connection The key thing that makes a difference to a client is the personal service from a surveyor. So, taking the time to let your client know you value them and are interested in their property is gold dust. It validates their decision in choosing you as their surveyor and instils confidence.
- Don't try to be everything to everyone depending on the size of your practice it is important to note that you do not need to do everything for your client yourself. If explaining liability caps is not your bag, then get the right person in your team to do it – just make clear your team's involvement and be up-to-date at all stages before you speak to a client.

Marion Ellis CCXP MRICS is a Chartered Surveyor and Customer Experience Strategist. you can find more about Marion here.



DOWN VALUATIONS

EXPLAINING WHAT THEY MEAN

CHRIS RISPIN BSC FRICS, DIRECTOR, BLUEBOX PARTNERS

Director of BlueBox Partners, Chris Rispin, explains what the valuer is trying to achieve and what the seller can expect from 'down valuations'.

Recent media coverage has alleged 'down valuations' are stopping some buyers from getting mortgages sorted out. A BBC story in July 2018 says that there has been a "significant" increase in properties being valued at an amount less than the buyers agreed to pay. This means, according to the UK's largest mortgage advisers, that buyers are having to find the extra money up front to avoid the loss of the property. However, some buyers have been able to renegotiate the price of the property in line with the valuation.

What exactly are 'down valuations'?

Emoov's CEO Russell Quirk said that 'down valuations' are down to surveyors "simply covering their backs"

But what are they covering their backs against? Is it the buyers to whom the valuer has a duty of care to ensure that the value is supportable in the general market? Is it the seller who is trying to get the best price for the property and to whom the valuer has no tortious duty or contract? Is it the regulator governing the actions of the valuer checking for independence and objectivity? Or, is it the lender who has a contract with the valuer and expects advice in accordance with an agreed specification for a mortgage valuation and who issued thousands of claims in the recent property recession for allegedly "over valuing"?

The graph below supplied by LSL Acadata demonstrates the overall impact of house prices. As you can see, various organisations report that asking prices are down in some



areas month on month and that sales in some parts of the country are taking longer to achieve.

Source LSL Acadata HPI. The figures are mix and seasonally adjusted

Consequently, it would be very surprising if valuers were not taking an objective view of the market and considering whether a particular sale price truly reflected Market Value. The crux of the issue lies in the valuer and seller following different rules.

Defining Market Value

Market Value's recognised definition is as follows:

"Market Value is the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion".

Below are the key things that a valuer needs to adhere to in order to comply with both the Regulator and their customer, according to the International Valuation Standards Section 104.

- The estimated amount this is the most probable price reasonably obtainable on the valuation date. It should be the best price for the seller and the most advantageous one for the buyer. It must exclude special terms or atypical financing or any element that would only be available to a specific owner or buyer.
- The willing buyer it's important that they're not over eager or determined to buy at any price. This buyer is also one who purchases in accordance with the realities of the current market and with current market

expectations, rather than in relation to an imaginary or hypothetical market that cannot be demonstrated or anticipated to exist. The assumed buyer would not pay a higher price than the market requires.

- The willing seller the seller should equally not be over eager to nor considered to hold out for any price. The factual circumstances of the seller are in effect ignored by the definition that puts in place this hypothetical basis.
- After proper marketing means that it is assumed that the exposure to the market has also been the best possible. There should have been enough time for the asset to be brought to the attention of a sufficient number of potential buyers. Some of this information may not be available to the valuer, but that assumption will be made.
- Most importantly, the definition requires that: "the parties had each acted knowledgeably, prudently", which presumes the parties are reasonably informed. However, they are not expected to act with hindsight, so the hypothetical parties are not expected to anticipate what the market might do.

Most valuers would expect a buyer active in the marketplace to be able to determine good value for the price. However, at the point the mortgage valuation is done, the buyer may be totally unaware of the property's true condition or any legal matters which may affect the purchase price. Therefore, this is a negotiation based on limited information, and the buyer may well wish to renegotiate when all the information is known. Equally, the sellers may be unaware of issues that could truly influence the price, particularly if they have used an unqualified or online only agent who may not even have seen the property and therefore has limited knowledge of this particular product. It is hardly surprising that so many sales fall through when the knowledge and prudence is not introduced into the process until the 11th hour!

Valuer's role

It is the role and responsibility of the valuer to apply a valuation based on specific guidelines. The lender must be able to rely on the valuation, not just for the next day, but for the full term of the mortgage, which could be more than 25 years.

This means the valuer must look at the property from all possible angles. The seller wants to achieve the best price and most sellers/agents will speculate on the market at the outset to see what level of interest there is based on past sales. This is a very different concept to producing an objective valuation.

With this in mind, it's important to understand that the valuer is not producing a 'down valuation', but a realistic Market Valuation based on the market evidence for the subject property. It also takes into account comparable evidence from actual sales of similar properties within a reasonable time frame and in a similar location. Allowance is also made for condition and legal issues, including compliance with Planning and Building Control.

It's common for agents to skip over whether the property is freehold or leasehold, or how much time is left on the lease. They also tend to ignore potential problems that affect value, such as Japanese knotweed in the garden, or whether the property is suffering from cavity wall tie failure and numerous other factors which the valuer must consider.

A valuer has a duty of care to their customer and must inform them if they consider the asking price unsustainable. The valuer must also consider whether that sale price is repeatable, that is, the person who made the bid is not a sole buyer, prepared to buy at any price in accordance with the definition as stated above.

External appraisals

The media coverage of 'down valuations' has also alleged a lack of internal inspection. However, this happens at the instruction of the lender, and is called an external appraisal. It was originally introduced to replace the former Bank Manager driving past a property being considered as a security for a loan, usually in circumstances where the loan was very small, and the property was a good investment for the bank. For fairly obvious reasons the banking industry decided they should have a qualified person to undertake such an inspection, however, this has transformed from being used for low levels of loan to higher ones undoubtedly with the bank's appropriate risk assessment.

However, it is clear that a valuer is unable to provide the same quality of appraisal as would be undertaken if a full inspection was completed, so inevitably there may need to be a level of caution. The valuer must make a substantial number of assumptions in determining the condition and value of the property, mainly using comparable evidence. The solution is to pay for a full inspection if the valuation is critical.

Assessment v speculation

The valuer is providing a professional valuation based on a recognised set of rules. Sellers and their agents, on the other hand, are speculating at the price that could potentially be achieved. In many cases that price may turn out to be the market valuation, but there will be times when the two are different.

Those active in the market will know when a property is overpriced and some will negotiate the price down. If buyers want more information on the property as a product before negotiating the price, then they must get a survey. Sellers who want to avoid last minute hassle should be asking agents for more details and those with the appropriate qualifications may be able to provide the answer.



WOULD YOU LIKE AN EXTRA PAIR OF HANDS ON SITE VISITS?

- RICS counts mentoring as informal continuous professional development
- An additional pair of eyes and hands on site
- Your chance to give back to the industry
- Mentors needed across England, Wales and Scotland
- May present you with an employment opportunity
- PL insurance provided by Sava

Call the Sava Training Team on **01908 442240** or email **training@sava.co.uk** for an informal discussion



BOILER PLUS

THE NEW STANDARDS FOR DOMESTIC BOILER INSTALLATIONS FROM APRIL 2018

DR LISA BLAKE, TECHNICAL MANAGER, SAVA

Lisa Blake looks at the Boiler Plus regulations that were introduced in April 2018, and how they affect boiler installations as well as the technologies promoted by Boiler Plus and the difference between an ErP boiler efficiency and a SEDBUK efficiency.

Boiler Plus was implemented on 6 April 2018 and aims to improve the way homes in the UK use energy by increasing the efficiency of their heating systems.

The new standard forms part of the Government's 'Heat in Buildings' programme, designed to maximise energy efficiency. The introduction of Boiler Plus is the first major piece of regulation since the UK went "all-condensing" in 2005 - becoming the first country to do so in the process.

What is Boiler Plus?

The Boiler Plus regulation states that all new boilers installed from April 2018 must have a minimum ErP (Energy Related Products) efficiency of 92%. Note that the ErP efficiency is not the same as the SEDBUK efficiency. New and replacement boilers must also have time and temperature control installed if they are not already present. At a minimum, this means a programmer and room thermostat. In addition, any new combination boiler must also have an additional energy efficiency measure installed.

What is ErP boiler efficiency?

In 2009, the EU adopted the ErP directive, a framework for setting the efficiency requirements of energy-related products. These are defined as products that use energy or have an impact on energy consumption, such as tyres, light bulbs and boilers. The ethos behind the directive is to reduce carbon emissions across Europe. There are two parts to the directive:

- **EcoDesign:** ensuring energy-related products meet performance and emissions standards at the point of manufacture.
- Energy Labelling: products should have an efficiency rating from G to A+++, which should be displayed on the product, ensuring end-users are aware of the level of energy efficiency within their products.

Boiler installers must now create a system Energy Label when they install a new boiler. The energy label gives the whole system (controls, storage, solar contribution and boiler) a rating based on its overall efficiency. To achieve an A rating the system must have an efficiency of over 90%.

How is ErP calculated?

ErP efficiency of a boiler is calculated in a different way to the SEDBUK, which are used for Building Regulations. The current minimum SEBUK 2009 efficiency for new boilers is 88%, while the minimum ErP efficiency is 92%. So, how do they compare? We looked at a mains gas combi boiler with a SEDBUK 2009 efficiency of 89.6%, which is compliant with current Building Regulations. The ErP efficiency of this boiler is 94%.

The ErP Data Sheet, which includes all relevant data, including the ErP efficiency should be available for all boilers on the market. The consumer will also have an ErP label on the appliance, which is similar to the energy labels on white goods.



Figure 1 - ErP label for a boiler



Figure 2 - ErP heating efficiency bands

The ErP efficiency bands for water heating are dependent on the hot water load:

Hot Water Load	A+++	A++	A+	А	В	С
М	≥163%	≥130%	≥100%	≥65%	≥39%	≥36%
L	≥188%	≥150%	≥115%	≥75%	≥50%	≥37%
XL	≥200%	≥160%	≥123%	≥80%	≥55%	≥38%
XXL	≥213%	≥170%	≥131%	≥85%	≥60%	≥40%

The ErP system efficiency is the overall efficiency of the boiler and any additional controls or supplements. There is a space heating ErP system efficiency and a hot water ErP water heating efficiency.



ErP System efficiency example

Figure 3 shows an example ErP efficiency label, the overall system efficiency is A+ for heating and A for hot water. This would be provided to the consumer when the boiler was installed. Please see the calculation to the right.

The consumer can see the whole system efficiency with other systems and the impact of good controls/ solar water heating. The idea, of course, is that consumers will have a clearer understanding of the benefits of an efficient boiler and the importance of enhancing the efficiency of the whole system with supplementary products.

	ErP Efficiency
Boiler (space heating)	94%
Controls	+4%
System (space heating)	98% (A+)

Boiler (hot water heating)	85%	
Solar water heating	+6%	
System (hot water)	91% (A)	

The Boiler Plus process

Figure 4 summarises the Boiler Plus process for the installer. Time and temperature controls (programmer and thermostat) must be installed if not already present for retro-fit boilers or new installs. This is the same as current Building Regulations. In addition, if the boiler being installed is a combi boiler, an additional energy saving measure must be selected. This is over and above current Building Regulations.



Figure 4 - Boiler Plus process

Boiler Plus technologies

Load compensation

This is an additional boiler control that adjusts the flow temperature according to the room temperature. When a room is cold, the temperature going to the radiators will be high, but as it warms up, less heat is required. This is when the temperature going to the radiators will be reduced.

This means a gas boiler matches the real heat requirements better than a simple on/off control, reducing energy wastage and maintaining comfort conditions. A condensing boiler works better at lower temperatures and ideally the water returning to the boiler should be less than 55°C. A load compensator helps to ensure this.

• **Benefits:** As well as money and energy savings, load compensation reduces wear and tear on the boiler as it minimises short cycling and start/stop operation.

Weather compensation

An additional control for the boiler that adjusts the flow temperature from the boiler according to the outside temperature. In a similar way to the load compensator, this control monitors the outside temperature. When the temperature drops outside, the temperature of the hot water to the radiators will increase. Conversely, when the outside temperature increases, the boiler will supply less heat and reduce the temperature of the water flowing to the radiators.

• **Benefits:** This is the simplest and easiest of the four options if a room thermostat is already fitted.



Figure 5 - Weather compensation outside sensor





Smart control

This provides automation and optimisation. Automation allows the device to automatically control the heating system output in response to programmed demand or occupancy detection. Advanced examples detect where householders are using sensor data or geolocation based on smart phone data. This means the heating system will not operate more than necessary when it isn't needed, and if householders are away for an extended period the heating can be switched off remotely or automatically. Optimisation means the device calculates how long it takes the property to reach the desired comfort level, and times the system's operation to minimise the amount of work it has to do. Usually it also modulates the output of the boiler in a similar way to load compensation, so as little fuel as possible is consumed.

Most boiler manufactures produce their own smart controls, but there are generic controls that can be installed with most boilers, such as 'Nest' or 'Hive'. There is a good article **here** comparing the features of several smart controls.

• **Benefits:** Smart controls learn as they're used, meaning they can achieve the optimum energy efficiency for personal circumstances.

Passive Flue Gas Heat Recovery Device (PFGHRD)

These devices enable users to reuse heat from the boiler that would otherwise be wasted. They are retrofit devices for older boilers that capture waste heat from flue gases and reuse it, to improve the efficiency of hot water production and save fuel and money.

Normally, flue gases escaping to the atmosphere can exceed 60°C. PFGHRD reclaim much of this wasted heat, letting the flue gases then vent to the atmosphere at a much cooler temperature. A heat exchanger is fitted around the flue coming from the boiler to heat up mains cold water that is fed into it. The heated water is then either stored in a tank for later use or used as pre-heated

incoming water for the boiler. Flue gas heat recovery has been used with commercial boilers for many years, with energy from the flue gases used to heat the water fed into the heating circuit. This was possible as the boilers were non-condensing and therefore had higher flue gas temperatures. With the advent of condensing boilers and lower temperature flue gases, flue gas recovery was used to pre-heat the domestic hot water. Early (2006) flue gas heat recovery devices often used additional pump or fan energy to recover the heat, more modern devices do not and are therefore considered passive.

• **Benefits:** These devices can achieve savings of up to 6% on gas usage, you can 'fit and forget' and no user input is required.





Figure 8 - PFGHRD with no store

Further reading: The Government have published some FAQs for consumers and installers, available online here.

Figure 7 - PFGHRD with store



