

A GUIDETO THE ARCHITECTURAL DESIGN & BUILDING PROCESS



An Introduction to Our Practice

Kay Pilsbury Thomas Architects is a family firm of Chartered RIBA Architects and BIID Interior Designers.

The practice specialises in repair, renovation and extension to historic buildings and our Designers and Architects all have building conservation experience/qualifications, coupled with endless passion for carrying out projects on old and historic buildings.

We are proud to incorporate green and sustainable materials, traditional details and craftsmanship with new technologies into each of our projects. We also enjoy working with local, skilled Building Contractors, specialist Craftsmen, and a chosen network of historic building Recorders, Archaeologists, Quantity Surveyors, Structural Engineers and Building Services Engineers with whom we have worked for many years.

We work enthusiastically with Owners to both reveal the historic layers, and add new layers of life to buildings.



Your Grand Design from Planning Approval to Completion

This Part 2 Guide has been produced to take Owners through the design and building process from Planning Approval through to Completion of the building works. It provides some honest views on the progression of a typical building project, allowing Owners the chance to understand some of the things to expect along the way.

Teamwork

The most important aspect to any building project is the mutual respect, support and encouragement between Owner, Building Contractor and design team. Projects can undoubtedly be trying at times, but we find that if the team is enthusiastic and conscientious, everyone will work extremely hard to create a building or renovation we can all be proud of.

Cost, quality, time

Each of these three aspects is important to all building projects.

Historic building projects differ from new build projects and this needs to be understood from the outset. Works to existing buildings usually involve specialist construction or repairs, and this will require the use of traditional building skills and materials. Existing buildings also hold lots of unknown and hidden problems.

This requires slower building processes and therefore historic building projects will always take far longer to design and construct/renovate than any new build. The specialist skills and the traditional materials required will also cost more. The large benefit of using these old techniques and sound materials is the creation of a high quality build that will last.





Architectural Work Stage 4 - Construction Drawings and Detailed Design

Having established the elements of work you wish to undertake, and the likely cost, we provide you with:-

- I. Floor, wall and roof construction sections, basic plumbing/electrical layouts.
- 2. Additional detailed drawings requested by the Local Authority for Discharge of Conditions on the Planning/Listed Building Consent applications.
- 3. Interior detailed design and schedules desired, such as:-Light fittings, carpets, curtains, paint schedules, furniture/soft furnishing schedules, Kitchen, bathroom design and joinery details (cupboards etc.).

If you choose to negotiate, often this list can be reduced, as the Contractor may only need designs for those elements he is unsure of, or which Building Control have requested.

If you choose to go out to competitive tender, then a full package will be required.

Given the amount of bespoke design required at this stage, it will take 3 to 6 months to complete this work stage, although, if you negotiate, this may be reduced.

On grant-aided work, and very large projects, we sometimes additionally produce a schedule of works for the Contractor to price against. On most domestic projects this is not necessary.

We send the detailed design for sign-off, so it is important that Owners are happy with all the items and finishes specified, as it is often too late, once items have been ordered, to send them back. We can order samples and it is well worth visiting showrooms to see and try fittings.



Structural Engineer

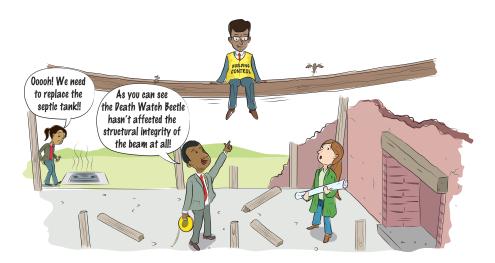
A Structural Engineer will be needed to produce the calculations and structural design for new roofs, footings and frame repairs. They are employed directly by the Owner, but the Architect will co-ordinate with them.

Full Plans Building Regulations Submission

The Building Regulations require building projects in England and Wales to comply with set standards for design and construction. This is to ensure the health and safety of people who live and work in and around them, whilst ensuring energy conservation and accessibility within buildings. Having produced a package, we then send it to Building Control for Full Plans Building Regulations Approval. There is a fee to the Building Control for this service. This usually will involve quite a few amendments to the drawings, and, once completed, you will be provided with the Plans Approval.

Discharge of Planning Conditions

Nearly all Planning Permissions and Listed Building Consents are now given on conditional approval. These conditions are listed on the bottom of your consent form, and usually ask for samples of bricks/tiles and detailed drawings of windows, doors and roof details. We fill out an application form to discharge these conditions, and submit it to the Council along with the necessary drawings, so that you have full approval to commence.





Architectural Work Stage 4.5 - Obtaining Tender/Quotation Price

Whether you are negotiating or going out to competitive tender; we shall produce a tender letter, requesting a price from the Contractor to be returned by a certain date.

We also will submit to the Contractor a quotation/tender form, requesting the construction start date, works duration, their workmen rates and craftsmen rates, and percentage mark-up on basic cost for materials and plant hire.

This is sent out with a detailed design package to the Contractors. They usually visit site to allow them to cost properly. Competitive tender takes 4 to 6 weeks.



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Architectural Work Stage 4.5 - Tender Review

Once we receive the prices on the due date from the Contractor, they are submitted to you.

Hopefully the tenders will come back within the estimated budget, but it is not unknown for tenders to come in higher than budget.

If a Quantity Surveyor has been employed for this work stage, they will check and compare the tender/quotation price for any discrepancies. They will also make sure the Builder hasn't missed anything and that their price for each section of work is what the Q.S would expect. The Q.S will then submit a comparison table and recommendations to you. On small projects where there is no Q.S, the client will usually have a meeting with the Builder and agree the works.







Architectural Work Stage 5 - Building Contract / Mobilisation

We will have discussed with you which is the appropriate Building Contract for your project. The most common contracts are traditional Building Contracts, such as JCT Minor Works, Intermediate, or Standard, depending on the scale/complexity of works. On very small projects, where there is no Contract Administrator required, we usually recommend Owners use the JCT HomeOwner Building Contract, without a Contract Administrator, to formalise their agreement and provide them with some security.

Having established which Contractor you wish to proceed with, and the elements of work that are to be undertaken, we will then write up the appropriate Building Contract between you and the Contractor, for each to sign.

This will include the accepted quotation/tender fixed price; start date, completion date, liquidated damages, and all the contract documents, including the detailed design package/drawings that the Contractor tendered on.

There are two options for insuring the works. Traditionally the Employer/Owner insure the works to existing buildings, by informing their insurance company of the building project, and the insurance company then simply extend the existing house policy. New builds are usually insured by the Contractor. With insurance companies reducing their risk, many Owners are finding their existing policy can't be extended to insure the building works and in this case, the Contractor will again insure the works.

Insurance of works and existing structure

This is a complex area, and neither an Architect nor a Quantity Surveyor can advise on this. Both the Owner's and the Contractor's Insurance Companies must come to a mutual agreement regarding the insurance required to be taken out by both parties.

Insurance of the works and existing house

The Contract sets out the Insurance terms. There are three options to choose from.

- Option A An all-risk policy The Contractor insures the works in joint names. (Normally for new-build only.)
- Option B An all-risk policy The Employer insures the works.
 (Normally for new-build only.)
- Option C An all-risk policy The Employer insures in joint names for their works, plus a joint-names policy to insure against loss or damage by the specified perils.

Most owners try Option C, as the works are to an existing building. They find, though, that their Insurance Company will not let them take out a joint names policy for the existing property. Therefore they have to adapt the Contract, and so:

- 1. The Builder insures the works in joint names on an all-risks policy.
- The Employer continues to insure the existing property and contents in their own name, making their Insurer fully aware of the works and agreements.
- 3. The lack of joint names exposes the Contractor, so they increase their Public Liability Insurance to cover the risk, and this must also include none negligent liability cover.



Architectural Work Stage 5 - Construction to Practical Completion

Your Home becomes a building site

Renting a property and how your Home changes into a Building site

On the agreed start date, the Contractor will take possession of the site.

Unless the works are detached from the house, or self-contained, we strongly advise Owners to move out of the property. Many people initially decide they wish to remain in the property, with the Builders working around them. But from many years of experience, we have found that the 8.00 a.m. starts, tired children, scared pets, dusty house, lack of water and electricity, constant noise etc. etc., soon begin to take their toll, until the relationship between Owner and Contractor becomes fraught. Basically your home becomes a building site, and we cannot stress enough that most people soon recognise the best thing they did was rent somewhere nearby, for at least the main section of the work.

The Contractor has possession and controls the site and house. For Health and Safety reasons, you will therefore need to advise him of when you wish to walk around the site. This sometimes feels a little strange for home owners, but so long as you have a good working relationship with your Builder, access and safety on site can be easily managed.



Contract Administration

For the first time in the project, the Architects role changes and they become a Contract Administrator. This means they must legally act impartially towards both the Employer and the Contractor. Therefore, the Contract Administrator is required to fairly and impartially check the works on site are being built as per the Contract documents, and provide the necessary Contract certification throughout. A Contract Administrator must not be confused with a Project Manager (who is employed directly by the Owner to act on their behalf, but has no Contractual powers). It is important to employ a Quantity Surveyor to undertake the cost control of the project, as this is not within the role of the Contract Administrator.

The role of the Contract Administrator is to regularly visit the site, either once or twice a month and to check the works are being undertaken to the specification. They will answer all the questions and queries that come in from the workmen on-site, and will discuss those variations to the building works when opening up occurs, such as how to undertake the repairs.

They also make sure that the Contractor has only applied for payment for those works that have been undertaken. At the same time the Quantity Surveyor will assess the applications for payment from the Builder . If the Contract Administrator is content with the work undertaken, they certify them each month with an Interim Payment Certificate. After this the Contractor will send you the monthly invoice, plus VAT where applicable.

The Contract Administrator documents all the variations to the building contract by writing Architect's Instructions, which list the works to be added/omitted.

The Builder is then required to provide a price for these changes each month for the Quantity Surveyor to assess.

Progress Meetings

Each month the Contract Administrator and Owner meet on-site to go through the Contractor's queries. On small projects, this is a fairly informal walk around. On large projects the meeting is normally a walk around, followed by a sit down meeting; with Contractor's, other Consultant's and Owner's Reports being read, and Minutes being taken.



Contingency Sum

There will be a contingency sum within the Contract to absorb the necessary variation works to the project. This is usually 15% of the cost of the works. In our experience, the contingency is always used up. It is very common for additional desirable items to be added in during the course of the works. These will be over and above the Contingency.

Niggles and Disputes

During the building process, there will undoubtedly be times when you feel frustrated or worried about a particular issue(s). Over the years, we have found the best way to deal with this is not by sending an irate e-mail, as this simply upsets the team relationship; but instead, pick up the phone and chat through any concerns or worries you may have. We can then discuss these and have a meeting if necessary, to address them quickly and amicably.

Quantity Surveyor

On every project we recommend that a Quantity Surveyor is employed during the construction phase, establishing the cost of the works and evaluating the Builder's costs for extra works as the job is on-site, and agreeing the final account is a very high priority for Owners. As such, Architects are not qualified to provide this advice, and therefore a Quantity Surveyor is employed to do this.

A Quantity Surveyor's role on-site includes:-

- Evaluating the monthly application for payment.
- Producing a monthly cost report, this offers advice to the client regarding the percentage of the work undertaken to date and the cost of work being applied for.
- Providing an assessment of the value of the variation prices submitted.
- Providing advice on the contingency sum left.
- Providing the projected estimated Final Contract Sum each month for all the additions/omissions to date.

It is not unknown for Contractors to be slow in providing prices for additions/ omissions. The problem with this is that you will not know the projected final cost until the end of the project, when it will be too late to omit items, or not undertake extra works, and results in the project going over budget. This can be the biggest downfall/cause of dispute in building projects, so we cannot stress enough how important a Quantity Surveyor can be, as they will insert costs if the Builder fails to do so.

If you wish to add work to the Building Contract, tell the Contract Administrator so they can write an Instruction; and for larger items, make sure you get a price before the work is undertaken to avoid unknown creeping costs.

Timing

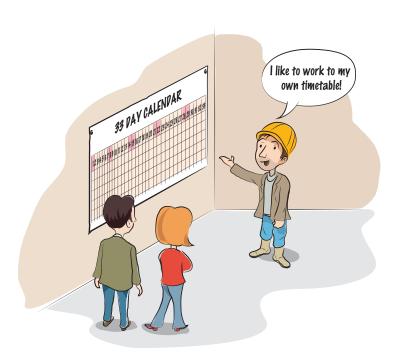
When additional or variation building work is added into the Building Contract, then an equal amount of additional time will need to be added onto the end of the Completion Date.

Many building projects need to be extended by around 15%, and on an average project, this often amounts to about two months additional time.

The Contract Administrator ensures the Contractor is working regularly and diligently while on site, but they are not able to "hurry him up". It is the Builders responsibility to manage the programme through to Completion. The Building Contract has liquidated damages, if the Builder overruns the completion date, which the Employer can apply if they so choose.

Rather than rely on the liquidated damages to keep abreast of the timing, which come in too late anyway, we recommend a monthly "Progress" Meeting with the Architect/Contract Administrator, Employer and Building Contractor.

At this meeting the Contractor presents any issues and reports on the programme.



Extension of Time

A Contractor is entitled to an extension of time to the Completion Date if extra works have been added to the project. It is the Contract Administrator's decision as to the extension of time the Builder will be granted. This is usually established through the percentage of work added to the original contract, and the complexity of the new work.

Please be aware that if the Contractor requests, and is entitled to, an extension of time of at least a few months, the Contractor will also be entitled to prelim site and overhead costs associated with this additional time. However, if an Owner needs to get back into the building by a certain date, the most productive way of progressing works for a final date is to sit down with the Contractor and discuss the options available. One option is Partial Possession of the building by the Owner, which involves then moving into part of the building whilst work is finished off elsewhere.

Non - completion and Liquidated Damages

If the Contractor fails to complete on either the contract date or the new completion date, if there has been an extension of time, then the Employer may choose whether or not they wish to charge liquidated damages.

Liquidated damages is calculated as the weekly sum of money agreed between the Contractor and Employer before the contract is signed, which must represent the actual sum of damages the Employer would incur if the contract finishes late. Most Employers relate this to rental charges and additional professional fees for attendance during the months the contract is running late.



Architectural Work Stage 6 - Practical Completion and occupation handover

On the original or extended completion date of the works, we shall visit the site and write a list of rectifications. By this date, the works should be completed, usually minus a few small items. Building Control must have also inspected the works and been provided with all the services certificates (electrics, plumbing, boiler etc) If they are content, Building Control will sign off the works and issue you with the Approval. The Contract Administrator will then issue the Practical Completion Certificate. The Building Contractor will then issue their penultimate Application for Payment, having agreed the Practical Completion final account with the Quantity Surveyor. At this time 2.5% of the 5% retention money which has been held back during the progress of the works is also released and paid to the Builder. The remaining 2.5% retention money is held back until completion of the rectifications.

Occupation / handover

At Practical Completion the Owner takes occupation of the building, and the site is fully handed over from Contractor to Owner.

The Owner must inform their insurance company that they have now taken occupation, and that Practical Completion has been reached.

At this handover meeting, the plumber, electrician and Contractor will show the Owners how to control the installed systems, and will hand over the installation and equipment instruction manuals.

Partial Possession

Sometimes Owners want to get into part of a building early, and if the Contractor agrees, they can take Partial Possession of these parts that are complete. Practical Completion is deemed as having been reached for that part of the building and the retention is proportionately released at this stage.



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Architectural Work Stage 6 - Rectifications and Congratulations

Rectifications are building works which the Contractor has completed, but which are faulty, or where small things have been forgotten, i.e. loose screws, a bare skirting, a missing knob, dripping tap etc. The works then need to be finished off by the Contractor, either during or at the end of the rectification period.

The list is produced by the Contract Administrator. Any new items added in at this time, such as an extra shelf, will be charged by the Contractor. The list should reflect rectifications, not new work. Needless to say, there are grey areas! The usual grey areas are the natural cracks in plaster and timber, caused by expansion not poor workmanship; scuff marks to paintwork, etc. In reality, the Owner and Builder need to be pragmatic and agree what is reasonable rectification. Any new work undertaken in this period that would have required payment during the works, like the addition of a fan because it is too hot, or an additional light in the corner, will require payment during the rectification period too.

The end of projects can sometimes be the most tricky, as the process is often long. It is therefore extremely beneficial if the rectification list is both realistic and achievable.

Most importantly, the whole team must have a positive relationship at this point, with mutual respect. On projects where this is maintained throughout to the end, this is a very positive and happy moment, and a great time to celebrate the achievement of the Builders for their craftsmanship; the Designers on their details and co-ordination; and the Owners for their inspiration and involvement. Everyone is then more inclined to finish all the rectifications and do some little extras along the way without a fuss, as they feel their work has been appreciated, and they are keen to leave with a good impression.



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Architectural Work Stage 7 – Rectification Period

Once the Owner has taken occupation, the works are in what is known as The Rectification Period. During this period the Owner should report any rectifications that come up, and occasionally the Contractor will need to visit to repair something. Commonly teething problems will happen with the heating system as it is turned on in winter:

It is tempting to write a long list of touch-up works for the Builder to do at the end of the Rectification Period. This must be resisted, as it is not for the Builder to re-paint walls that have scuff marks and etc., as these are not rectifications, they are just wear and tear of living in the house. Therefore, the Builder will rectify / repair anything that has fallen off, or is not working, and this will be done within a reasonable period at the end of the Rectification Period.

Final Completion and Photographs!

As Vinnie Jones once said, "It's been emotional", but it will also have, hopefully, been an interesting and rewarding experience, resulting in a beautiful building to be proud of.

When all the rectifications are complete, at the end of the Rectification Period, we carry out a final visit, then issue the Making Good Certificate, which states all the rectifications have been undertaken.

The Builder then has to issue his final account. This will include any additional or new works that were done or required during the Rectification Period.

The Quantity Surveyor will then review the Builder's final account, or the Owner will agree it directly with the Builder if there is no Quantity Surveyor.

The Quantity Surveyor will then issue their Final Certificate, and certify release of the final 2.5% retention and the final payment for any extra work done.

The Final Certificate is issued

We then issue the Final Certificate, certifying this amount, and the Owner pays the Builder.

At the end of the project we love to take professional photographs, for our portfolio, of the finished building in all its glory. We then send owners a copy of these, together with a selection of 'before' photographs of the building. This is a really fantastic way to complete and celebrate the renovation and building works.

Then it is over to you to enjoy and use the building to which you have dedicated so much time and passion!

