

# RIAS - Improving Construction Quality Forum

16 October 2023

RIAS HQ, Rutland Square, Edinburgh

Representatives attended from:

RIAS
Norr Architects
Architype
AHR Architects
Reich & Hall
Anderson Bell Christie
Austin Smith Lord
Bennetts
Collective Architecture
Hawkins Brown
Holmes Miller
HLM Architects
LDN
MAST
Oberlanders
Page & Park
Stallan Brand
Scottish Futures Trust

## Summary Notes from the Forum

### 1.0 Some Takeaways for Early Action

- Continue to embrace responsibility
- Be more bold about what we need
- Use the Positive “No”
- Stimulate collaboration early
- Celebrate success
- Seek to reduce vulnerability
- Seek to reduce suspicion

### 2.0 Initial thoughts on construction quality issues?

- Quality is not just about the onsite construction process.
- Striving for quality in all areas of the industry and at all stages of the process is required and this should involve all people and disciplines involved in the process
- Needs holistic approach
- Passivhaus:
  - The adoption of Passivhaus over the last few years has driven a requirement for upskilling for both designers, contractors, and the supply chain. It requires a rigorous regime of checking and recording construction information and processes. Can the same rigour be applied to all projects?
  - Engendered a sense of pride and comradery across the team.

- Submission for Building Standards approval is too late to move to a Passivhaus approach. The form factor and orientation must be decided well before that stage.
  - Can we adopt approaches for improving construction quality akin to Passivhaus for all projects?
- The reasons for change:
- The profession is losing good people due to the conditions architects are now forced to work under, long hours, low fees and on some projects, unpleasant working environments.
  - Need to deliver quality if we are to achieve net-zero / sustainability aims.
  - Reputation of the sector in the press and across the public is poor.
  - If construction is to be seen as a high-status sector, we need to improve its reputation and market it better to the current and future workforce.
  - Duplication/ overlap of roles is wasteful, time consuming and risky.
- Areas to focus on for improvement - 'to increase the chance of success'
- Better understanding of the role of the architect.
  - Promote each team member doing what they are trained to do.
  - Clients not customers. Calling them 'customers' suggests a transactional approach and underplays the key role the Client plays in the success of a project.
  - Pre-construction stages are important - setting up for success.
  - There needs to be earlier team building and setting up for effective and sustained collaboration. The skill set of an Architect makes them a critical member of a team at the outset of projects.
  - Everyone should be encouraged and enabled to take pride in their work.
  - An objective should be to have more enjoyment in the delivery of projects.
  - There is a nervousness and suspicion between the parties. This needs to be addressed and trust built. There is still an adversarial "them and us" attitude.
  - We should be more bold in expressing what we need
  - There are instances where architects have been refused access to inspect the works or have been told they must be escorted by the contractor and access is restricted to certain areas. Whilst site inspection duties may, or may not, form part of the architect's scope of service depending on the nature of the procurement route selected, preventing an architect from looking at the construction on site, to check it is in line with their details, is negligent.
  - Better availability and use of lessons learned - could be a "black box" approach. Can RIAS be a vehicle for sharing knowledge on construction quality - linked to CQIC?
  - Understand what 'getting it right first time' means.
    - The design process is not linear, it is iterative and adequate time is required, you don't just draw it once. It can and should be many iterations and testing to get it right.
    - Measure success on construction quality, not just programme and cost.
    - There needs to be much more celebration of success.
    - Change the procurement and appointment culture of lowest cost wins.

- Quality Plans
  - Needed for all stages and for all parties. Needs to focus on what that party is doing to deliver quality. Needs to actually be implemented.
- Programme
  - Realistic response to the brief is essential.
  - Appropriate time to be given to the pre-construction stages.
  - Additional time for the new activities such as clash detection, should also be allowed at the pre-construction stage.
  - Adequate allowance needed for design development.
  - Enough time to be ready at key stages
- Clarity of expectations - at all stages
  - Employers' requirements are key - Clients need to better understand what they need and what they are receiving.
  - Better supporting the Client and acting in their best interests to resolve problems.
  - "We don't allow people to do their jobs properly".
  - Moving Client to Opex model critical. How the facility will operate needs considered at all stages.
  - Allow early and direct engagement between the Architect and Client/ end user to avoid things getting lost in translation and failing to understand the Client's needs.
  - More open and transparent discussion and less suspicion (feel less vulnerable).
  - A direct line of communication between the Client and the Architect to be ensured.
- Design development
  - Design coordination is essential - ensuring there is a team and collaborative ethos.
  - There needs to be an understanding that design is an iterative process and allowance made for this to happen.
  - There must be a realistic design programme. The design programmes architects propose should be adopted or at least reviewed with them to understand the need for the time proposed.
  - The role of Contractor Designed Portions (CDP) has proliferated - The reasons for this and the issues arising need to be determined - CQIC have a working group that is going to doing a survey on the use of CDP and from this a guide on best practice will be developed.
  - Status of design development prior to construction is key. The use of incomplete RIBA stage information for "Market testing" should be avoided.
  - There needs to be cost transparency otherwise architects cannot design within the budget. Aspirations must align with the budget and this is one of the reasons architects should be involved at the business case development stage.
  - Passivhaus adoption over the last few years has required focus on detail.
  - Scopes of service must reflect the client expectations and the brief / programme.

- Digital platforms are increasingly important tools for addressing the performance gap and move to decarbonisation and net zero
- Procurement
  - Due to it not being easily quantified or measured, Quality is not currently widely viewed as a measure of success - it is not a project KPI- was it delivered 'well' (on time and on budget) rather than whether it works and contributes to the place / operates properly etc. Not easy to measure.
  - Decisions on procurement route are critical to success of a project.
  - Quality culture can help to manage risk - applying the golden thread and holding this approach throughout the project lifecycle.
  - Quality and procurement are inextricably linked.
  - Understanding the role of procurement in achieving better construction quality needs to be a factor.
  - 'Paying properly to do a proper job' by all concerned. This includes fees to cover the required services and tenders for the construction works.
  - Being clear about expectations - scope and budget required.
  - Support Clients to see the benefits of early engagement with contractors and ensure this input is budgeted for, meaningful and formalised by using pre-construction agreements.
  - Learning from the significant difference between the way things are done in the public and private sectors.
  - Cross learning from other sectors such as energy could be helpful.
  - Support Client by providing advice about contract / procurement route.
- Competency and skillsets - across all players in the process
  - Importance of education and training.
  - We need to actually take on board lessons learned.
- Leadership
  - Key area for change in culture.
  - Communication across all parts of the chain.
  - Roles and responsibilities need to be well defined. This is too often not the case.
- The Compliance Plan Approach is an opportunity for architects and can contribute to better quality outcomes. See [Building Standards - CQIC | Construction Quality Improvement Collaborative](#) for information on the Approach.

### 3.0 The 12 commitments in the construction quality charter- what can architects do within their practices and on their projects?

<b>Quality control and assurance</b>	<ul style="list-style-type: none"> <li>➤ Doing it right first time - at the right time           <ul style="list-style-type: none"> <li>○ Processes are in place to ensure compliance and to prevent errors</li> <li>○ Mechanisms are in place to detect and address any variations to agreed standards</li> <li>○ Appropriate project resources are available for budget, programme, design, materials, and skills</li> </ul> </li> <li>● <i>Building capacity in Clients</i></li> </ul>
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	<ul style="list-style-type: none"> <li>• <i>Architects having access to the Client and helping them navigate the process</i></li> <li>• <i>Better procurement and fee levels to allow a proper commitment of time and effort</i></li> <li>• <i>Allow appropriate timescales for quality review and safety checking</i></li> <li>• <i>Issue with PII needs to be addressed</i></li> <li>• <i>New Compliance Manager role will contribute to quality control</i></li> <li>• <i>Understanding quality does not start when work commences on site.</i></li> <li>• <i>Better engagement with the contractor at the start of the process.</i></li> </ul>
<b>Behaviour</b>	<ul style="list-style-type: none"> <li>➤ Creating the conditions that embed a “right first time” culture <ul style="list-style-type: none"> <li>○ Leadership demonstrates a commitment to delivering the CQIC vision and values at all times</li> <li>○ All personnel are engaged and committed to creating a positive working environment with the right conditions for realising change</li> </ul> </li> <li>• <i>Everyone needs to be “singing from the same hymn sheet”.</i></li> <li>• <i>The Positive “No” when asked to do something that does not feel right.</i></li> <li>• <i>Embrace responsibility at all levels.</i></li> <li>• <i>Clarity on Design Responsibility Matrix</i></li> <li>• <i>Encourage a collaborative culture from the start.</i></li> </ul>
<b>Alignment</b>	<ul style="list-style-type: none"> <li>➤ All parts of the process are designed and implemented to drive quality, improve performance, and deliver compliance <ul style="list-style-type: none"> <li>○ Leadership support initiatives that are designed to align policy and guidance across the sector</li> <li>○ Project delivery systems, including procurement, are aligned to drive quality</li> <li>○ Everyone has access to the right information at the right time</li> </ul> </li> <li>• <i>Too many project delivery systems that don’t promote quality. They are price driven.</i></li> <li>• <i>Upskilling of the sector for the pipeline - e.g. Passivhaus, retrofit etc.</i></li> <li>• <i>Clarity of statutory obligations</i></li> </ul>
<b>Competence, Roles &amp; Responsibilities</b>	<ul style="list-style-type: none"> <li>➤ Ensuring that everyone is clear about their roles and responsibilities and is competent to deliver them <ul style="list-style-type: none"> <li>○ Appropriate project leadership and management is in place</li> <li>○ Culture encourages everyone to accept responsibility for delivering quality</li> <li>○ Everyone has the right skills, experience, and qualifications to do a quality job</li> <li>○ We are all committed to developing people</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Clarity on project leadership is required when the project team operates as a flat non-hierarchical structure</i></li> <li>• <i>Understand need for “Golden thread” and deliver.</i></li> <li>• <i>Better Client understanding of Architect function.</i></li> <li>• <i>Architects to be educated and trained as part of the construction industry to avoid elitism and skills gap.</i></li> <li>• <i>Architects being a part of the construction sector, not separate.</i></li> <li>• <i>Everyone doing the job they are trained to do.</i></li> <li>• <i>Better CPD/skills development</i></li> <li>• <i>Embracing learning lessons culture</i></li> <li>• <i>Fee levels that allow development of people</i></li> <li>• <i>Appropriate involvement of senior people showing leadership</i></li> <li>• <i>Procurement route to enable, and re-skilling done, to allow Architects to re-establish their site inspection. The designer of the detail is the best person to inspect that detail as they understand it.</i></li> <li>• <i>CDP directed at “specialist” design and carried out at the right time.</i></li> </ul>
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#### 4.0 CQIC Values across the sector - on a scale of 0 to 10?

	RIAS	Average of other forums
• Ambition	5	6
• Commitment	5	7
• Collaboration	5	5
• Openness	2	5
• Respect	4	5

Would like to get all beyond 8... to help make change sustainable...

#### 5.0 Design process / RIBA Plan of Work

- Different gateways used by different programmes - NHS/ Education, Frameworks etc.
- Stage 4 means something different across the design team/ can be used for market testing
- Procurement route constraining role on CDP
- Assessing quality against fee is challenging
- Design is iterative process and not linear
- Team should have an eye on the project output at Stage 3
- Deadline of the building warrant as a target
- Fee scales might be an option
- Address PII issue
- Should be a vision and not brief at the start.
- POE/BPE critical for architects
- ‘Specialist design’ and not ‘contractor design’

## 6.0 Architecture and Place Division

- Undertaking a review of architecture policy
  - Outcomes
  - Supporting the sector
  - Opportunities for investing in design
  - Public programme for architecture

## 7.0 Further support and collaboration

- CQIC will be issuing a survey on the use of CDP at the beginning of February. The outcomes of the survey will be used to develop best practice guidance on the use of CDP. Support for the survey will be important if the work is to be of value.
- RIAS to undertake a review of the RIBA Plan of work development as part of the TVC programme
- Cross discipline meeting was suggested. CQIC, RICS and RIAS in the first instance.

## Background and Context to the CQIC

The accompanying CQIC presentation provides a summary of the background and context.

A link to the website is here: [CQIC – Construction Quality Improvement Collaborative - CQIC | Construction Quality Improvement Collaborative](#)

The following additional details highlight the CQIC journey.

- CQIC
  - Work started in 2019 post Cole Reports on Edinburgh Schools, DGOne and the Grenfell tragedy.
  - Officially launched in February 2023
  - It is a workstream of the Transformation Action Plan which flows from the Scottish Construction Accord.
  - 90 organisations have committed to the Charter which is at the heart of CQIC
  - 26% of those organisations are contractors
  - 12% are representative organisations who see the benefit for their members.
  - There are 7 architects practices that have committed
  - CQIC and the Charter are a part of the Scottish Government procurement of a new Civil Engineering Framework
  - As a part of engagement on CQIC and the Charter regional forums have taken place in Dumfries, Perth, and Aberdeen. These involved participation from Client organisations, consultants, designers, contractors, and the supply chain. A session was held with RICS and was attended by PM/Cost Consultancies.
- Work is ongoing on the Transforming the Value of Consultancy (TVC) programme. This is addressing issues with regards to scopes of service, fees, procurement, etc.