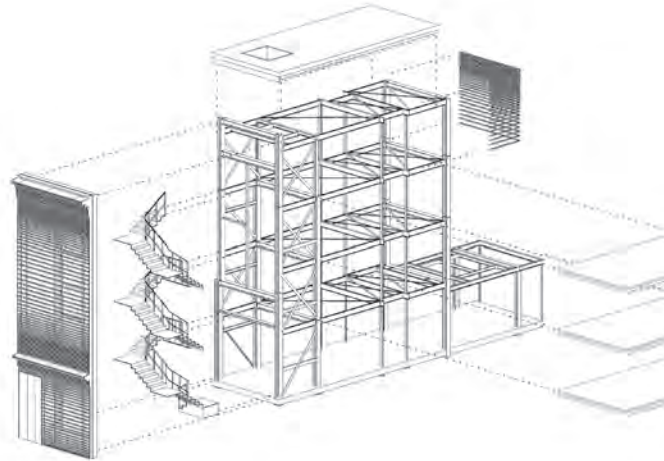


# Working with an architect for your development



RIBA   
Architecture.com

BEFORE INTERNAL AREA 148M<sup>2</sup>



AFTER INTERNAL AREA 211M<sup>2</sup>



## Working with an architect

Getting value out of the development process is a challenge, particularly if you are a first time or fairly new developer. Appointing architects from an early stage is central to optimising the asset and creating value. They apply impartial and creative thinking whether you are planning a new build or adapting or expanding an existing property.


Architects are also committed to mitigating the disproportionate impact of the construction industry on the environment. Mobilised under the RIBA's 2019 declaration of a climate and biodiversity emergency and backed up by an evidence-based roadmap to deliver healthy, water-efficient, biodiverse, low-energy, net-zero carbon development by 2030, architects are ready to help you to meet rising market expectations and regulatory pressure for sustainable buildings.

This booklet outlines how and where your architects can help, from the early stage scenario of 'what do you think I should do?' through to 'how do I deliver it?' and 'what have we learned to achieve greater value on the next project?'

If you need help with finding an architectural practice that is right for your project, the RIBA Client Services team can help.

**020 7307 3700**  
**[clientservices@riba.org](mailto:clientservices@riba.org)**





'An ingenious and beautifully detailed family home on the site of a tumbledown double garage.'

Marco Goldschmied,  
Stephen Lawrence Prize founder





## Finding solutions

Architects are problem-solvers and can develop solutions and efficiencies before and during construction.

They will work to understand your needs and support your strategic decision-making at an early stage. They can assess the site, set out options, carry out feasibility studies, and help you develop a robust project brief.

They will assess the best ways to achieve your aspirations and will present options to you and your stakeholders, enabling you to decide on the best route forward.

Architects will work to understand your business and help you maximise your investment while minimising your impact on the environment. Working to the RIBA's eight sustainable outcomes aligned to the UN Sustainable Development Goals, architects can offer you clear and measurable targets to support your social and environmental objectives.

**‘Value is generated on drawing boards not on site.’**

**Paul Morrell OBE**

Former Chief Construction Adviser to Government

RIBA Sustainable Outcomes

Environmental Sustainability

Social Sustainability

Whole Life Net Carbon

Economic Sustainability

Outcome	Whole Life Net Carbon		Economic Sustainability					
	Net Zero Operational Carbon	Net Zero Embodied Carbon	Sustainable Water Cycle	Sustainable Connectivity & Transport	Sustainable Land Use & Ecology	Good Health & Wellbeing	Sustainable Communities & Social Value	Sustainable Life Cycle Cost
Metric	kWh/m <sup>2</sup> /y kgCO <sub>2</sub> e/m <sup>2</sup> /y	TCO <sub>2</sub> e Embodied	Litre/person/year Potable water	kgCO <sub>2</sub> e/km/per occupant	Species added Enhancement	Various Metrics	Various Metrics	£/m <sup>2</sup> value
Principles	<ol style="list-style-type: none"> <li>1. Prioritise deep retrofit of existing buildings</li> <li>2. Prioritise Fabric First principles for building form and envelope</li> <li>3. Fine tune internal environment with efficient mechanical systems</li> <li>4. Provide responsive local controls</li> <li>5. Specify ultra low energy sufficient appliances</li> <li>6. Specify ultra low energy sufficient IT</li> <li>7. Prioritise maximum use of onsite renewables appropriate to context</li> <li>8. Demonstrate additionality of offsite renewables</li> <li>9. Offset remaining carbon through recognized scheme</li> </ol>	<ol style="list-style-type: none"> <li>1. Prioritise building re-use</li> <li>2. Carry out whole life carbon analysis of building elements.</li> <li>3. Prioritise ethical and responsible sourcing of all materials</li> <li>4. Prioritise low embodied carbon and healthy materials</li> <li>5. Minimise materials with high embodied energy impacts</li> <li>6. Target Zero construction waste diverted to landfill</li> <li>7. Promote use of local natural materials</li> <li>8. Consider modular off-site construction systems</li> <li>9. Detailing to be Long Life and robust</li> <li>10. Design building for disassembly and the circular economy</li> <li>11. Offset remaining carbon emissions through recognized scheme</li> </ol>	<ol style="list-style-type: none"> <li>1. Provide Low flow fittings and appliances</li> <li>2. Provide Waterless appliances where possible</li> <li>3. Provide Leak detection</li> <li>4. Provide Rainwater and greywater recycling and attenuation but consider operational implications of complex systems</li> <li>5. Provide on-site black water cleansing and recycling if viable</li> <li>6. Create Sustainable Urban Drainage that supports natural aquatic habitats and human amenity</li> </ol>	<ol style="list-style-type: none"> <li>1. Create comprehensive green transport plan including digital connectivity</li> <li>2. Prioritise high quality Digital Connectivity to avoid need for unnecessary travel</li> <li>3. Prioritise site selection with good proximity to public transport</li> <li>4. Provide high quality pedestrian links to local amenities</li> <li>5. Provide end of journey provision for active travel runners and cyclists (showers, dry lockers etc)</li> <li>6. Provide infrastructure for electric vehicles as a priority</li> <li>7. Provide car sharing spaces</li> <li>8. Provide suitable onsite personal storage</li> </ol>	<ol style="list-style-type: none"> <li>1. Leave a site in better 'regenerative' ecological condition than before development.</li> <li>2. Prioritise Building and site re-use</li> <li>3. Prioritise Brownfield site selection</li> <li>4. Carry out sustainable remediation of site pollution</li> <li>5. Retain existing natural features</li> <li>6. Create mixed use development with density appropriate to local context</li> <li>7. Create a range of green spaces (green roofs, vertical greening, pocket parks, green corridors)</li> <li>8. Create habitats that enhance bio-diversity</li> <li>9. Create 'productive' landscapes for urban food production</li> <li>10. Zero local pollution from the development</li> </ol>	<ol style="list-style-type: none"> <li>1. Provide spaces with strong visual connection to outside</li> <li>2. Provide responsive local controls eg opening windows, or local control</li> <li>3. Design spaces with appropriate occupant density for activity</li> <li>4. Design spaces with good indoor air quality</li> <li>5. Design spaces with good indoor daylighting, lighting and glare control</li> <li>6. Design spaces to adaptive thermal comfort standards</li> <li>7. Design spaces with good acoustic comfort</li> <li>8. Design spaces that are inclusive and universal accessible</li> <li>9. Prioritise active circulation routes-e.g. stairs, cycling provision, walking routes etc</li> <li>10. Provide indoor and outdoor planted spaces</li> </ol>	<ol style="list-style-type: none"> <li>1. Prioritise placemaking that expresses identity and territory</li> <li>2. Create secure places for privacy</li> <li>3. Create places for social interaction</li> <li>4. Create vibrant mixed use places</li> <li>5. Provide high quality permeable links to social amenities</li> <li>6. Provide High quality pedestrian public realm</li> <li>7. Create inclusive Places for community interaction</li> <li>8. Create Secure Places with overlooking views</li> </ol>	<ol style="list-style-type: none"> <li>1. Carry out whole life cycle analysis of key building systems</li> <li>2. Carry out Soft Landings Graduated to Handover and aftercare</li> <li>3. Measure energy costs</li> <li>4. Measure management and maintenance costs</li> <li>5. Measure overall running costs</li> <li>6. Measure added value of occupant health and wellbeing</li> <li>7. Measure added value of sustainable outcomes of building</li> </ol>
	<i>Performance Verification:</i> Publicly disclose energy use and carbon emissions	<i>Construction Verification:</i> Construction measurement and offset	<i>Performance Verification:</i> Measure potable water usage in operation	<i>Performance Verification:</i> Post Occupancy Evaluation occupant survey	<i>Construction Verification:</i> Measure bio-diversity enhancement in use	<i>Performance Verification:</i> Post Occupancy Evaluation	<i>Performance Verification:</i> Post Occupancy Evaluation questionnaire	<i>Performance Verification:</i> Measure operational running costs

## Taking the lead



Architects add value, whether it comes from designing a product that is attractive to the market, changing use, improving functionality, increasing capacity or making a scheme more buildable and sustainable.

They will develop solutions and propose ways to reduce cost.

Architects can set up and lead the design team to consult with community, help to achieve planning consent, and complete the project more effectively and efficiently.

**‘The architect, client and contractor working together from an early stage will help to ensure an excellent product.’**

**Steve Clow**


Hampshire County Council Property Services



Optimise the asset







'Don't underestimate  
the power of  
architecture as a  
marketing tool.'

James Heather Argent

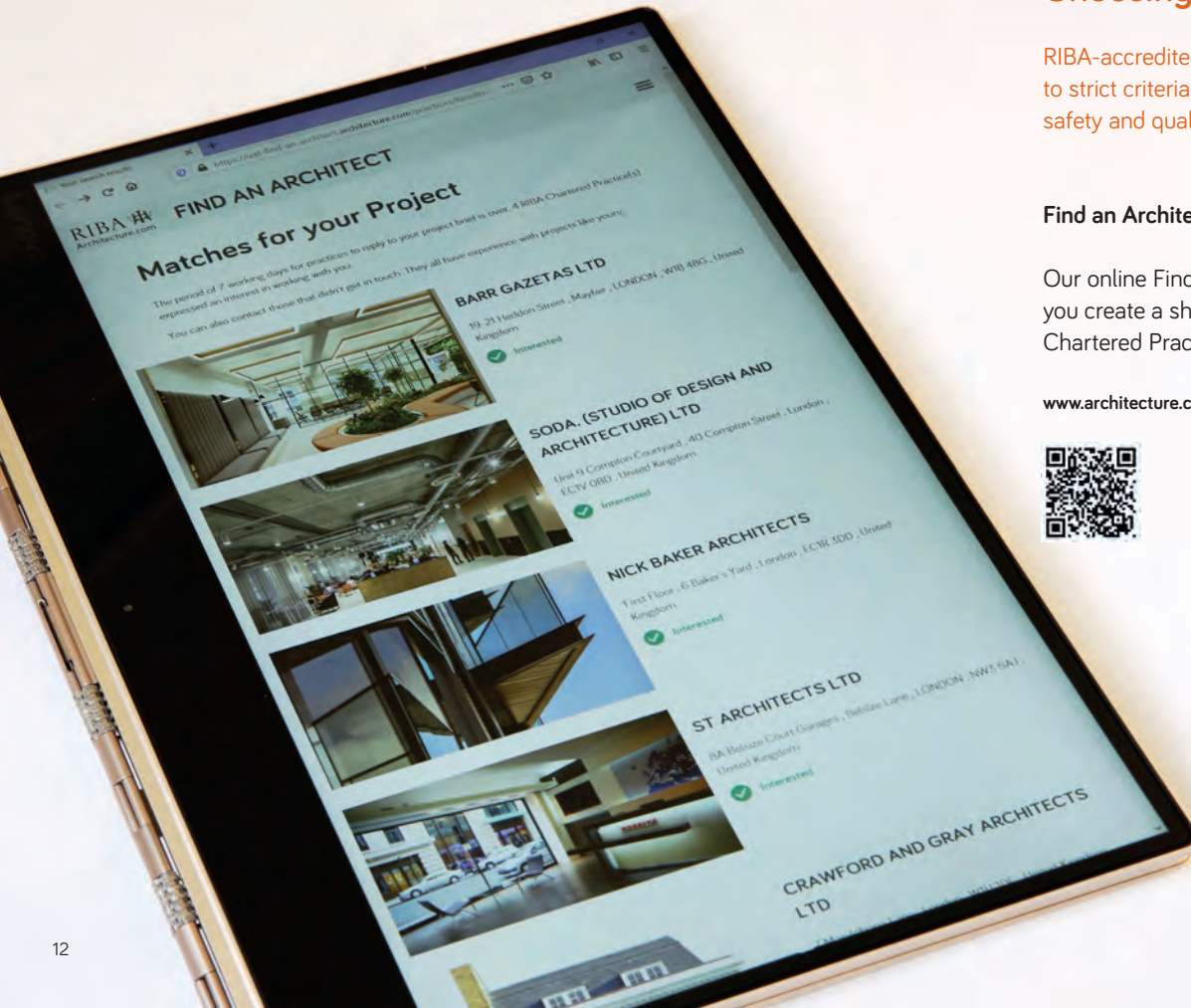
## Choosing an architect

RIBA-accredited Chartered Practices adhere to strict criteria covering insurance, health and safety and quality management systems.

### Find an Architect

Our online Find an Architect service can help you create a shortlist from over 3,850 RIBA Chartered Practices and 42,000 projects.

[www.architecture.com/find-an-architect](http://www.architecture.com/find-an-architect)



## Referrals Service

Alternatively we will create a shortlist of Chartered Practices with the right skills and experience on your behalf. We only suggest accredited firms, who meet the RIBA's stringent standards of quality and service.

The service is confidential and provided free of charge.

[www.architecture.com/working-with-an-architect/referral-service](http://www.architecture.com/working-with-an-architect/referral-service)



[clientservices@riba.org](mailto:clientservices@riba.org)

## RIBA Client Advisers

These experienced architects can provide independent advice at any stage of the project. Working with your project team, they can help select the right architect, draw up a business case, prepare the project brief, set up and lead the project team, or manage the procurement on your behalf.

[www.architecture.com/knowledge-and-resources/resources-landing-page/riba-client-adviser-register](http://www.architecture.com/knowledge-and-resources/resources-landing-page/riba-client-adviser-register)



## RIBA Competitions Service

An architectural competition or competitive interview can be a successful procurement model that helps you select a design team or design. Competitions can help drive up quality, stimulate creativity and innovation, and generate a range of ideas that improve choice.

The RIBA has an experienced team who can advise and arrange competitive selection processes to meet your requirements. Using the RIBA to manage and support your competition brings credibility, prestige and rigour to the process.

[www.architecture.com/competitions](http://www.architecture.com/competitions)



# The Process

The **RIBA Plan of Work** is the nationally recognised standard model setting out the key stages of a construction project from conception to completion.

You can commission architects for any of the stages you need for your project.

[www.architecture.com/knowledge-and-resources/resources-landing-page/riba-plan-of-work](http://www.architecture.com/knowledge-and-resources/resources-landing-page/riba-plan-of-work)



Architects have recently formalised their commitment to sustainability in line with the UN Sustainable Development Goals. Their targets are set out in the **RIBA Sustainable Outcomes Guide**.

[www.architecture.com/knowledge-and-resources/resources-landing-page/sustainable-outcomes-guide](http://www.architecture.com/knowledge-and-resources/resources-landing-page/sustainable-outcomes-guide)



**RIBA**  
Plan of  
Work



## Stage 0 Strategic Definition

The primary goal of Stage 0 is to confirm that a construction project is the best means of achieving your goals.

The focus is on making the right strategic decisions and capturing them in a business case. This entails considering the risks and budget for a range of options and carrying out site surveys and planning appraisals.

It is worth gleaning lessons from similar completed projects to help the briefing process, which will improve design quality and make the building perform better.

### Stage 0 Strategic sustainability outcomes

A suitably qualified sustainability champion is in place.

A sustainability strategy relevant to your requirements and including ambitious and unambiguous targets for each of the sustainability outcomes is integrated into your business case and the project brief.

## Stage 1 Preparation and Brief

The primary goal of this stage is to approve a project brief and confirm that the intended building can be accommodated on the target site.

This process might entail undertaking a feasibility study that tests options against the project budget, assesses the risks, and sources comprehensive information about the site.

The project brief works up your requirements in more detail, dictating key milestones and containing guidance on the project outcomes, sustainability targets, and quality aspirations.

This is also when you should do a number of other critically important tasks that will enable the smooth running of your project, avoiding delays, waste and cost:

- select a suitably qualified design team
- prepare a project execution plan and project programme
- set your information requirements so that you get the right level of detail at each stage
- agree who is responsible for what in a responsibility matrix.

### Stage 1

#### Strategic sustainability outcomes

A site-specific sustainability strategy is included in the project brief.

Sustainability targets are defined, ambitious and measurable, and are shared across the project team.

Requirements for post-occupancy evaluation, handover and aftercare are defined.



## Stage 2 Concept Design

The primary outcome from this stage is that you approve the architectural concept.

Design work starts in earnest and you and other members of the design team review the design iteratively to check that it matches the project brief and budget, and sticks to various project strategies, including those for quality, regulatory compliance, and sustainability.

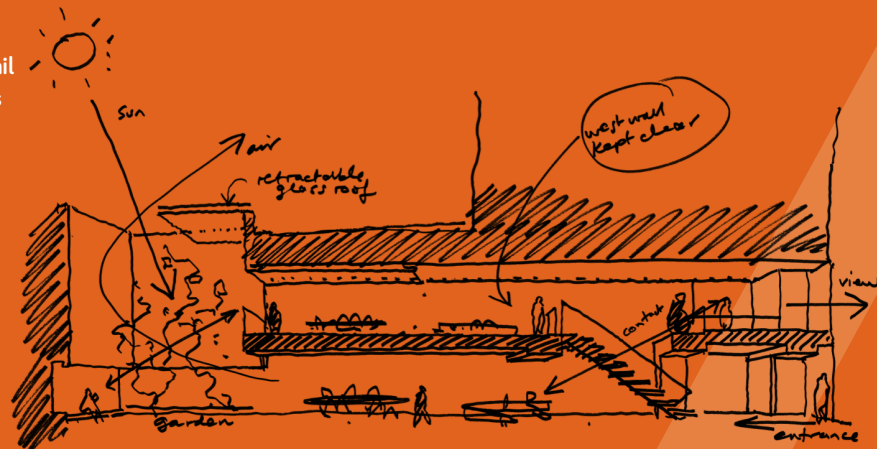
While the project is still in its infancy and planning permission has not yet been secured, the level of detail in the design at this stage is only as robust as it needs to be to proceed to the next stage.

This is also when you agree a design programme in line with the overall project programme.

### Stage 2

#### Strategic sustainability outcomes

The architectural concept design integrates the sustainability strategy with the project brief. Sustainability targets are included in the outline specification and cost plan.



## Stage 3 Spatial Coordination

The primary outcome from this stage is a spatially coordinated set of design information that can be submitted for planning approval.

This involves increasing the level of detail in the design by testing and validating the architectural concept against inputs from engineers and other designers and checking it against the budget and the building regulations to create robust design information that can be included in a planning application. Different tools may be used to facilitate this process, including design workshops.

The objective is to prepare the ground for the final detail to be completed for construction by the various designers without the need to compare work.

You will also reality-check your design programme and review your various project strategies, including that for sustainability.

### Stage 3

#### Strategic sustainability outcomes

The spatially coordinated design is checked against the sustainability targets.

Professional design services are coordinated with the sustainability strategy.

The sustainability strategy is made explicit and included in statutory submissions and the stage report.

The sustainability targets are reflected in the cost plan, planning application and outline specification.

## Stage 4 Technical Design

The primary goal of this stage is to produce all the detailed design information required to manufacture and construct the project, at which point most of the specific project strategies - including that for sustainability - are hard-wired in.

Some of this detail will be prepared by the architects, some by specialist subcontractors, as agreed in the responsibility matrix. While they will be able to develop their designs independently and with a degree of autonomy, the lead designer will coordinate each designer's work.

Your procurement strategy may influence the structure of the project team at this point. For example, whether your architect and other designers will continue to be contracted to you or be novated to work under the contractor.

Stage 4 is when you submit a building regulations application and discharge any pre-commencement planning conditions.

### Stage 4

#### Strategic sustainability outcomes

The sustainability strategy and verified sustainability targets are included in manufacturing information and construction information, including specification, drawings and the sustainability targets' performance parameters.



## Stage 5 Manufacturing and Construction

The main goal here is to manufacture, build, and commission your project in accordance with the terms and conditions of the building contract. The stage ends on issue of a Certificate of Practical Completion.

Previously agreed procedures for responding to site queries, reporting on quality, and inspecting works will ensure that the works go smoothly.

Practical completion is not the end of the project. Before the certificate is issued, certain tasks must be performed to allow handover in Stage 6. These include commissioning the building's systems, drawing up a list of defects, and gathering information together that allows you to operate the building safely and as designed.

### Stage 5

#### Strategic sustainability outcomes

The sustainability targets are verified with interim testing and monitoring.

Deviations from the sustainability targets are reported and mitigated.

Adequate commissioning and maintenance contracts are in place.

Aftercare representative(s) have been identified and booked to come on site.

A plain English building manual setting out the sustainability strategy is produced.

Asset information, including the sustainability strategy and building manual, is disseminated to you and others who need them.

## Stage 6 Handover

The primary outcomes from this stage are handover, aftercare and the conclusion of the building contract with the issue, usually twelve months after Practical Completion, of a Final Certificate.

The construction team will rectify residual defects as promptly as possible under the terms of their contract.

The aftercare includes a review of the team's performance to learn lessons for the benefit of future projects and a 'light touch' post-occupancy evaluation to assess real performance against the design intent. These processes are particularly valuable if you intend to undertake other construction projects.

### Stage 6

#### Strategic sustainability outcomes

Building users and managers are trained in how to operate the building with reference to the sustainability strategy.

The building manual is issued to facilities managers and building users.

Aftercare, including a 'light-touch' post-occupancy evaluation, is carried out according to the plan-for-use strategy.

Project feedback is gathered and reported to the project team to help to improve their performance on future projects.

## Stage 7 Use

Usually falling beyond the end of any design services or the building contract, this phase is when you can continue to check that the building is effective and used, operated and maintained efficiently.

For example, you might commission full post-occupancy evaluation services to determine how the building is performing in use to help fine-tune the building and inform future projects. Alternatively, you might appoint facilities managers. Both will benefit from comprehensive and properly structured information about the asset to help them in their tasks, emphasizing the importance of planning for it upfront.

For completeness's sake, Stage 0 starts again at the end of the building's life or when it is due to be refurbished, extended, or converted.

### Stage 7

#### Strategic sustainability outcomes

Lessons learned from any post-occupancy evaluation are fed back to all stakeholders.

Knowledge is shared and performance outcomes are published, where possible.

Feedback is used to optimise building performance.

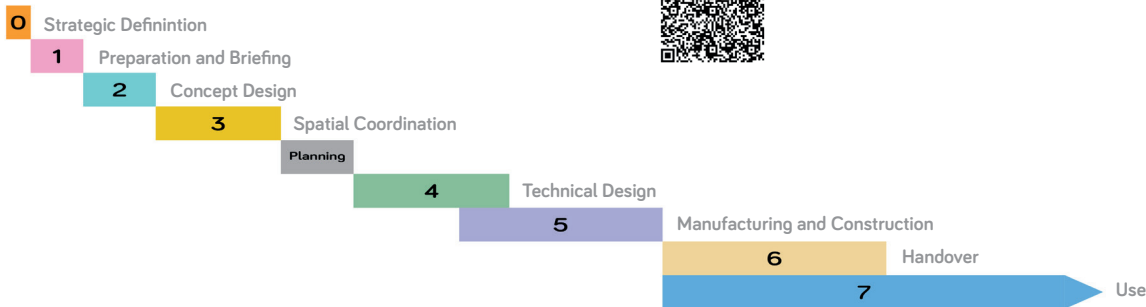
Any deviations from the sustainability outcomes are reported and mitigated.

## Example project programme

**Stages 0-4** will generally be undertaken one after the other.

**Stages 4 and 5** will overlap in the project programme for most projects so that construction can start on key elements and certain design information can be based on complete construction work.

**Stage 5** commences when the contractor takes possession of the site and finishes at practical completion.



## Appointing an architect

A good working relationship between architect and client is crucial to the success of any project.

For a more detailed explanation about the appointment process and how to get the most from your architect read 'A Commercial Client's Guide to Engaging an Architect'.

[www.architecture.com/riba-books/books/practice-and-business-management/product/9781859468050-a-commercial-clients-guide-to-engaging-an-architect.html](http://www.architecture.com/riba-books/books/practice-and-business-management/product/9781859468050-a-commercial-clients-guide-to-engaging-an-architect.html)





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