

GUIDE TO R&D TAX CREDITS

RIBA BUSINESS



OVERVIEW

The UK Research & Development tax relief (R&D) regime is very favourable towards businesses. It provides tax credits of up to 33% of the expenditure that qualifies as “R&D”.

The key issue is to optimise the amount of expenditure that qualifies as R&D. The traditional view of R&D is scientific research by someone wearing a white coat in a laboratory. Whilst this may be true, architectural/engineering development activities also tend to qualify.

Architecture as a profession is always developing and encompasses many disciplines that can qualify for R&D. Typical engineering skills covered by Architectural Practices include civil engineering, structural engineering, mechanical engineering such as computational fluid dynamics, new materials and material technologies, sustainable technologies and software engineering.

This guide will take you through the rules and the underlying legislation to explain when claims can be made. However, as the R&D legislation is included within UK Tax Law and is administered by HM Revenue & Customs, there are thresholds that need to be met before a claim can be submitted, and like all tax claims, the devil is in the detail.

Firstly, only companies can claim R&D. This means that non-company architect practices such as those in Limited Liability Partnership (LLP) structures cannot generally claim. However, it is always important to seek specialist advice on whether you can claim before ruling yourselves out and missing out on potential R&D tax relief that you are entitled to.

WHAT IS R&D?

The tax definition of R&D bears little resemblance to other definitions of R&D, such as legal, dictionary or accounting definitions. However, as HM Revenue & Customs are also not specialists in R&D, they rely upon the international definitions developed by the Organisation for Economic Cooperation & Development (OECD) and are known as the “Frascati” rules.

These Frascati rules were passed to what is now called the Department for Business, Energy and Industrial Strategy (BEIS). The BEIS then worked the Frascati rules into guidance that is set out within HMRC Manuals (CIRD 81900 refers – <https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird81900>). It remains the only part of the HMRC R&D Manual that has been legislated and has the force of law.

Compliance with this guidance is critical for R&D. This is because if the project does not qualify from a technical perspective, it is not possible to make a claim.

This guidance sets out three core requirements:

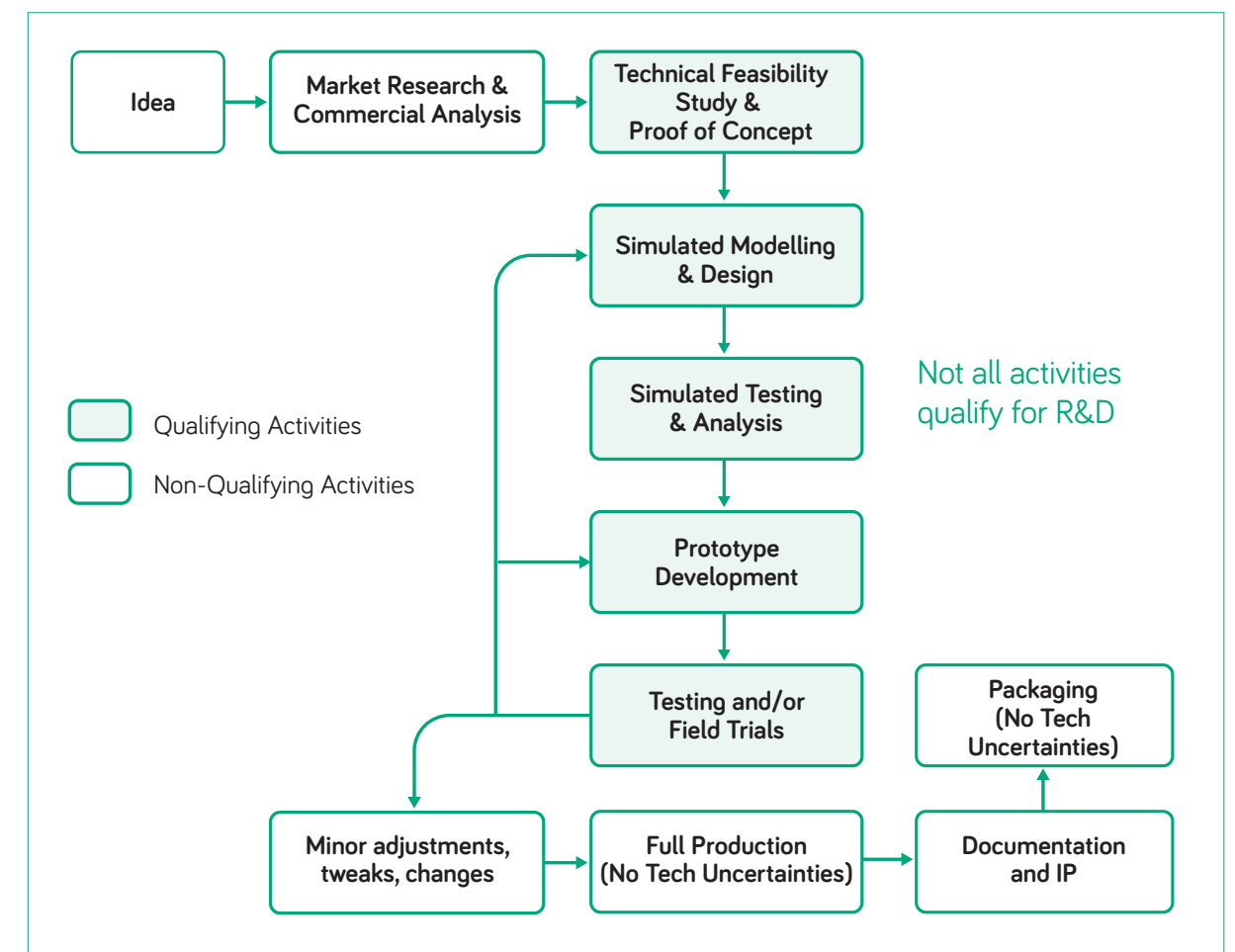
- 1 An advance in science and/or technology must be sought
- 2 There must be underlying scientific and/or technological uncertainty
- 3 The resolution process must be systematic

Fundamentally, you are likely to qualify if you are embarking on a process to resolve a technical challenge, where, through the resolution of that challenge, you gain new or improved knowledge/capability that can be applied or adapted further for future projects.

This guide will frequently refer to a project. However, there is no guide as to what constitutes a project, and this is left to the company to decide. For example, it could be a single design for a single client, or it could be an overarching project, such as a common design that could be used in a variety of circumstances where there are many sub-projects. For R&D, it represents those activities within the project that qualify for R&D. It should be recognised that not every activity within the project will qualify. This means that claims of 100% of the project cost will be rare.

PROJECT ACTIVITIES

Activities within a project can either be direct or indirect; they can also be qualifying or non-qualifying.



Qualifying direct activities that contribute to project resolution can include:

- (i) activities to create or specially adapt software, materials or equipment needed to resolve the scientific or technological uncertainty, provided that the software, material or equipment is created or adapted solely for use in R&D
- (ii) scientific or technological planning activities
- (iii) scientific or technological design, testing and analysis undertaken to resolve the scientific or technological uncertainty

Qualifying indirect activities can include:

- (i) scientific and technical information services, insofar as they are conducted for the purpose of R&D support (such as the preparation of the original report of R&D findings)
- (ii) indirect supporting activities such as maintenance, security, administration and clerical activities, and finance and personnel activities, as undertaken for R&D
- (iii) ancillary activities essential to the undertaking of R&D (e.g. taking on and paying staff, leasing laboratories and maintaining research and development equipment including computers used for R&D purposes)
- (iv) training required to directly support an R&D project
- (v) research by students and researchers carried out at universities
- (vi) research (including related data collection) to devise new scientific or technological testing, survey, or sampling methods, where this research is not R&D in its own right
- (vii) feasibility studies to inform the strategic direction of a specific R&D activity

Non-qualifying activities include:

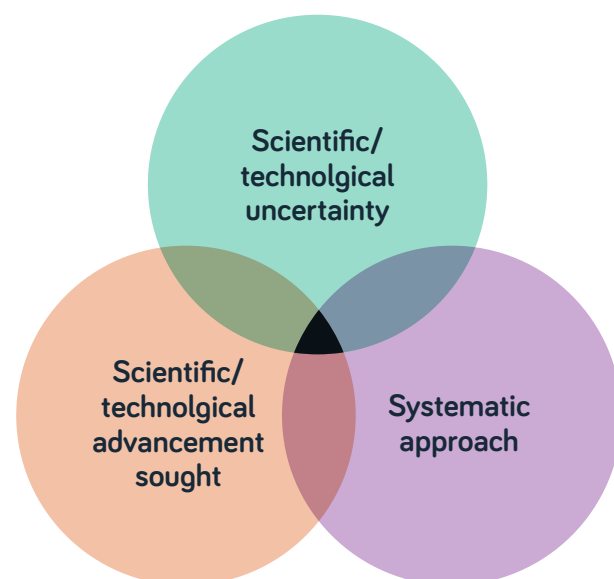
- (i) the range of commercial and financial steps necessary for innovation and for the successful development and marketing of a new or appreciably improved process, material, device, product or service
- (ii) work to develop non-scientific or non-technological aspects of a new or appreciably improved process, material, device, product or service
- (iii) the production and distribution of goods and services
- (iv) administration and other supporting services
- (v) general support services (such as transportation, storage, cleaning, repair, maintenance and security)
- (vi) qualifying indirect activities

BOUNDARIES OF R&D

A project starts when the first uncertainty is identified, and it ends when the last uncertainty is clarified. All the stages in between are measured through either identification of new uncertainties and/ or iterations of the resolution process for each of the uncertainties.

Key Requirements

There are three key requirements to be met



1 SEEKING ADVANCES IN SCIENCE AND/OR TECHNOLOGY

An advance is new knowledge or capability. Broadly speaking, the company learns something new in the field of science or technology.

This can include the development or improvement of a product or process including the optimisation, efficiency, sustainability, or waste management, whereby the technologists in the company increase their knowledge above the current baseline level i.e. what is publicly available. Therefore, the new knowledge gained can be already known to other companies but has not been disclosed to the public domain.

It is possible for a project that fails to meet its objectives to qualify.

It does not include a fine tuning of an existing process or product, nor does it include a project merely because technology has been used in its design. Similarly, any project involving routine analysis, adaptation or copying is unlikely to qualify as R&D.

Examples of advances include:

- (i) *Development of construction methods for an environmentally challenging site, with complex time constraints*
- (ii) *Improving the acoustic performance of a slab, ceiling system for applications in flexible working environments*
- (iii) *Adapting to architecture a methodology that may be certain in other fields or professions*

The new knowledge must be measured by reference to what HMRC describes as a “competent professional” and is usually a senior architect with experience in that field.

2 UNDERLYING SCIENTIFIC AND/OR TECHNOLOGICAL UNCERTAINTIES

An uncertainty is a problem. The key definition we need to consider here is the problem solving carried out by the project team on all the challenges that they faced to reach their advance.

The uncertainty is indicated by the extent to which the problem can be “readily deduced” by the competent professional. If the answers are publicly available (such as in a book or accessed online) and only require routine adaptation, they are considered to be readily deducible and would not qualify as technological uncertainties.

Many architects may have seen designs incorporated in other buildings or other types of products elsewhere in the world. Their design may still qualify if there are factors unique to this project, such as environmentally challenging conditions or requirements to use different materials. This is because the original architects are unlikely to have published how they achieved their designs, and the new design may include an amount of reverse engineering.

Furthermore, it also includes “system uncertainty”. System uncertainty is where known products and/or processes are combined, and/or integrated, and the overall performance is uncertain.

There is a distinction between an unknown and an uncertainty, where the solution may not be apparent at the outset. However, for an unknown, the exact sequence of work is readily deducible, whereas for an uncertainty there may be multiple approaches that can be applied.

Examples of uncertainties include:

- (i) *How to develop a suitable enclosure adjacent to airspace, eradicating any potential contaminants*
- (ii) *How to ensure and maintain adequate air quality within the designed enclosure*

It is possible to use some soft indicators to determine whether there were uncertainties within a project.

- a Time** – The project took more time than expected
- b Iterations** – The more iterations, the better for R&D
- c Cost** – The project cost more than initially budgeted
- d Experience** – The need for skilled and experienced individuals on the project

3 THE RESOLUTION PROCESS MUST BE SYSTEMATIC

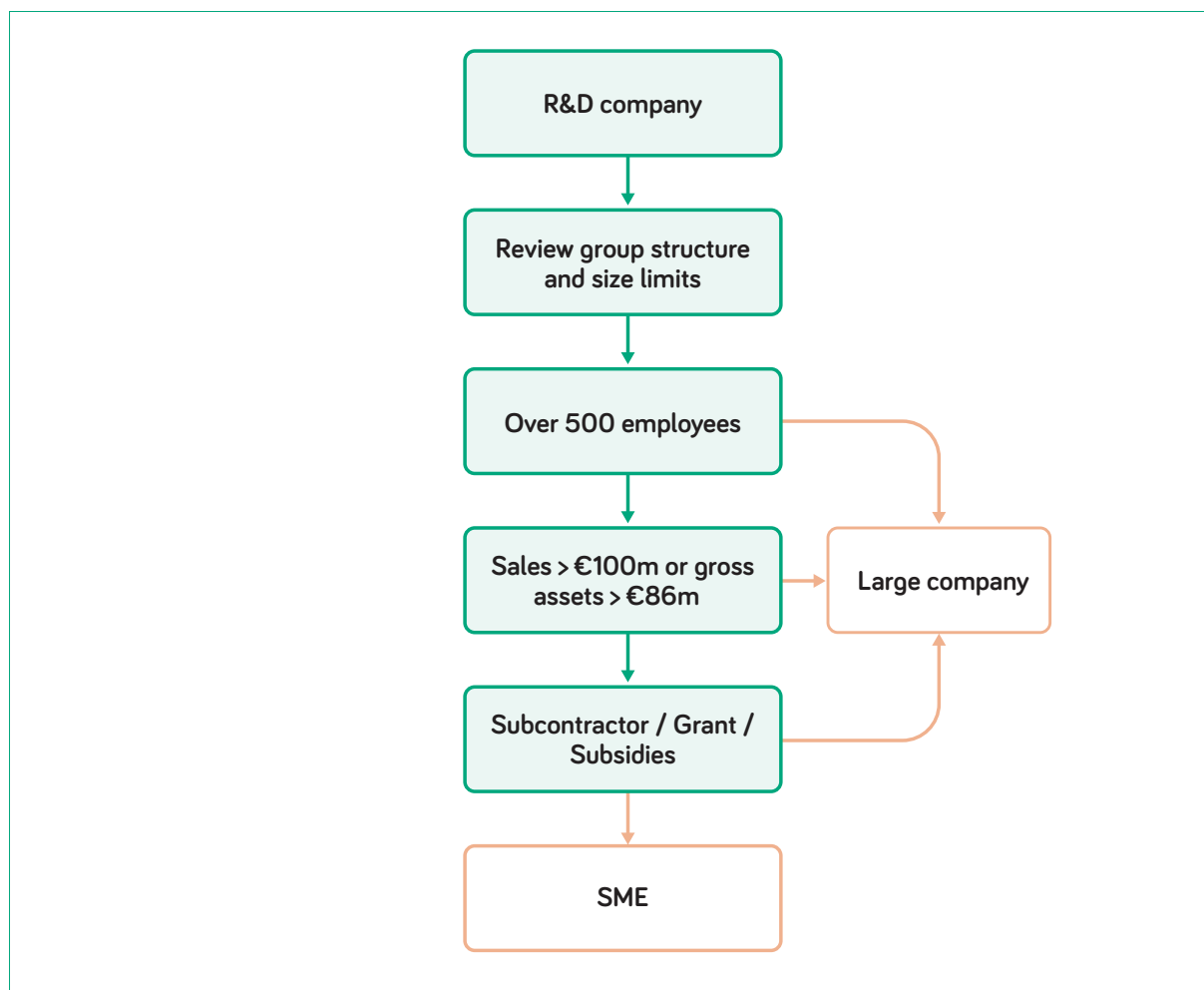
Perhaps, the most basic of the criteria and the easiest to identify is whether the design work incorporates a systematic, iterative process to resolve the uncertainties. Generally, the more iterations, the longer the project, which implies the solution was not readily deducible.

R&D SCHEMES

There are two R&D schemes – the ‘SME scheme’ and the ‘Large Company scheme’ which are distinguished by size criteria.

Broadly speaking, a company that is SME must have fewer than 500 full time employees. (Remember that two part time employees may count as one full time employee) and either gross sales income of under €100m or gross balance sheet assets (as measured by the net book value of fixed assets plus current assets) are under €86m.

It is critical to consider other entities within the same group, or even under the same common control as the claimant R&D company, as group companies and common controlled companies (as well as companies that are connected by virtue of a shareholding of at least 25%) may compromise SME status.



R&D BENEFIT

Subcontracted arrangements

Once the correct scheme has been identified, it is still possible for a SME company to be treated as ‘Large’ depending on its contractual arrangements with its client. If the architect has been subcontracted by, or had its expenditure subsidised by its client, then that project may be considered to fall under the ‘Large Company scheme’.

Please note that some projects may still qualify under the SME regime.

You also need to assess whether a subcontract exists or not. A contractual relationship with a client does not always trigger a subcontract basis, and the guidance provided by HMRC in its manuals is helpful in this regard.

HMRC manuals at CIR84250 state that we should consider:

- the degree of autonomy enjoyed by the person engaged
- the ownership of intellectual property (IP)
- the economic risk in any arrangements

A contractual arrangement whereby the contractor retains the IP is likely to be a sub-contract. Indicators could also be a time and material invoice opposed to a fixed price invoice. Clearly, with a fixed price basis, the supplier potentially takes on risks if cost overrun in delivering the contract.

Other contractual arrangements that are common include collaborations whereby the architect, their client and other suppliers (for example a structural engineer) work collaboratively on a single project each bearing its own costs. In these circumstances, each collaborator may be able to consider claiming R&D in respect of its own costs.

Subsidised expenditure arrangements

There is little guidance in respect of what is meant by subsidised, but the following extract from the minutes of the R&D Consultative Committee held on 17 October 2013 may be helpful:

5. Subsidised expenditure

“HMRC Policy Lead” agreed that the guidance required further review to give an indication of where the boundary lay between subsidised and non subsidised expenditure. The meaning of ‘subsidised’ (CTA 2009 S1308) referred to expenditure being met directly or indirectly which was not particularly helpful as all expenditure is met indirectly in some way or other. **Currently HMRC took the view that there needed to be a clear and direct link between the payment received and the qualifying expenditure.**

However, just because an architect receives payment from its client does not always indicate a link with the architect’s underlying expenditure (unless this is expressly stated within the contract).

Qualifying expenditure

Once the correct scheme has been established, the category of qualifying expenditure is as follows:

The SME scheme and Large Company scheme apply different maximum claim percentages as set out below. The time-based costs need to reflect the proportion of qualifying R&D activity, whether direct or indirect that is carried out, and the maximum claim percentage adjusted accordingly. It is rare for any employee to claim the full 100%.

	SME scheme	Large Company scheme
TIME BASED COSTS		
Staffing		
Gross salary (income reported on the employee's payslip and taxed under PAYE).	100%	100%
Employer National Insurance Contributions	100%	100%
Employer Pension Contributions	100%	100%
Subcontractor costs		
Limited companies	65%	Nil
Individuals	65%	100%
Partnerships	65%	100%
Universities/ charitable institutions	65%	100%
Externally Provided Workers		
Workers who are not employed by the company but are employed by a staff provider who invoices the company. The worker must be engaged under the company's supervision and direction. There are additional conditions.		
Worker employed by freelance subcontractor	65%	65%
Worker employed by group company	As staff	As staff
Contributions to independent research		
Payments to UK universities and charities. Approved non-UK institutions are listed on the HMRC website.	Nil	100%
MATERIAL BASED COSTS		
Consumable materials		
Materials consumed during the R&D process. For architectural practices, these are unlikely to be substantial but could include modelling costs. The model is in effect a prototype and there is generally no intention to sell it	100%	100%
Energy costs		
Light, heat, power etc consumed by the employers and other workers engaged in the R&D process.	100%	100%
Software costs		
Licence costs of developer tools used by software engineers as part of their R&D process. Practices are unlikely to have substantial software costs.	100%	100%

HOW THE R&D RELIEF IS CALCULATED

Where Practices are engaged in R&D, qualifying expenditure will typically include staff salaries, some freelance contractors, potentially some recharged expenditure from another group company and energy costs.

Examples

Assume the following qualifying expenditure applies and all costs have been expensed in the company's accounts:

a SME company

	Proportional Cost	Claim %	Qualifying expenditure
Staff costs	125,000	100%	125,000
EPW: Freelance contractors	50,000	65%	32,500
EPW: Group recharge	30,000	Real cost	25,000
Subcontractors	20,000	65%	13,000
Energy costs	4,500	100%	4,500
	229,500		200,000

The qualifying expenditure of £200,000 is then subject to a 130% additional tax deduction.

This means that the tax deduction in the company's tax computations is £460,000 rather than £200,000. This additional £200,000 is only disclosed in the tax computations so the company's accounting profit or loss remains unchanged.

Where the company is profitable and the additional £260,000 tax deduction reduces taxable profits, the company's tax liability (assuming a 20% tax rate depending on year accounts relate to) reduces by £52,000.

Where the company is loss making or where the additional £260,000 converts a tax profit into a tax loss, the company can elect to surrender the lower of the adjusted R&D cost (£460,000 in this example) or the tax loss for tax credits. This surrender carries a conversion rate of 14.5%. Assuming all £460,000 can be surrendered, this means that the tax credit would be £66,700.

These results can be illustrated as follows:

Profit making company – benefits up to 26% of qualifying expenditure (ie 52 ÷ 200).

Loss making company – benefits up to 33% of qualifying expenditure (ie 66.7 ÷ 200).

b Large Company or SME company subject to subcontracted projects

	Proportional Cost	Claim %	Qualifying expenditure
Staff costs	125,000	100%	125,000
EPW: Freelance contractors	50,000	65%	32,500
EPW: Group recharge	30,000	Real cost	25,000
Subcontractors	20,000	0%	0
Energy costs	4,500	100%	4,500
	229,500		187,000

The qualifying expenditure is subject to a 11% calculation known as R&D Expenditure Credit (or RDEC) and based on the above figures this would be £20,570.

This £20,570 is shown in the accounts as either “other income” or as a deduction against costs, and therefore increases taxable profits.

The whole £20,570 is then treated as a credit against the company’s corporation tax charge. As the company’s tax charge was increased by tax on the £20,570 of £4,114 (assuming tax at 20%), the net benefit to the company would be £16,456.

Non-tax paying companies can also benefit, as the credit is refundable to the company out of PAYE and NIC paid by the company in respect of employees involved in the R&D process. In this circumstance, the 11% RDEC Credit is reduced by a withholding tax equivalent to the current rate of corporation tax. This means that the net benefit to a large company would be 8.8%. The withholding tax is then carried forward and is available to offset against the company’s first corporation tax liabilities.



CASE STUDIES

It must be recognised that some firms cannot qualify as they are structured as LLP’s. These firms would need to carry out some form of incorporation to a limited company prior to making any claim. Other firms will not qualify as they rely on traditional methodologies and procedures and are not involved in modern designs.

However, where practices are known for their innovative designs – whether in specialist sectors or in challenging locations or using specialist materials or through employing specialist people, it is likely that there may be R&D to some extent or another. The potential this R&D creates should be explored.

CLIENT 1 – 40 EMPLOYEES

Background

27 projects identified to qualify for R&D tax relief including:

- Development of advanced sustainable building fabric design techniques for the largest scale application on an existing building attempted in the field
- Design of an advanced research facility that has been innovatively developed to accommodate all stages of automotive research, ranging from desk analysis to sensitive but highly hazardous lab testing, in adjacent spaces of the same building
- Development of a versatile and robust modular off-site manufactured timber panel system, to deliver sustainable and efficient primary school environments

Benefit to client

Total tax benefit received by client = £190,000

CLIENT 2 – 22 EMPLOYEES

Background

Five qualifying projects:

- Development of new concepts for standardised off-site manufacturing processes
- Improved cladding technology for prefabricated applications
- Development of novel prefabricated volumetric construction above existing roof with reduced steel use
- Innovative green wall modular technology
- Design of a novel scheme based on Structural Insulated Panels (SIPs) for self-supporting prefabricated volumetric construction

Benefit to client

Total tax benefit received by client = £32,000

CLIENT 3 – 10 EMPLOYEES

Background

Sample of qualifying projects:

- Development of complex exterior building elements associated with the façade and entrances
- Development of 3D modelling and visualisation technology for communication of complex design concepts, through immersive photorealistic augmented reality models and animations
- Research surrounding the use of modular ceramic components in furniture and interior applications, including exploration of unique colour coatings, mould construction techniques, and fibreglass cores as a method of minimising weight
- Design of a housing concept with integrated smart technologies for assisted living, sustainable performance and waste disposal efficiency
- Development of mixed mode ventilation and water harvesting systems, for integration into access bridge infrastructure and surrounding landscape soil, to improve the sustainability of a large commercial project

Benefit to client

Total tax saving for client = £19,000

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