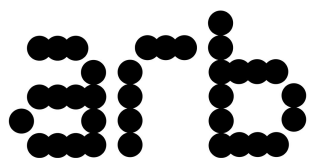




ARB Competence Guidelines:

Sustainability



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Introduction

Climate change is one of the defining challenges of our time. Humanity is facing a Climate Emergency which requires urgent action. Under the Architects Code of Conduct and Practice (the Code) architects should consider the wider impact of their work, advising their clients how best to conserve and enhance the quality of the environment and its natural resources, in pursuit of sustainability.

The high level wording of the Code now needs expansion in order to provide sufficient guidance to architects on how to approach the challenges of the Climate Emergency.

What is 'competence'?

Competence is the combination of skills, knowledge, experience and behaviours that enable a person to carry out a defined task to an acceptable standard.

Standard 2.4 of the Architects Code of Conduct and Practice (the Code) provides that architects are expected to keep their knowledge and skills relevant to their professional work up to date and be aware of the content of any guidelines issued by ARB.

Who these guidelines apply to

All architects are subject to the provisions of the Code, and are expected to be competent to carry out the tasks they are engaged to do. We do however recognise that competence requirements change depending on an architect's job role and the context of their work. We also recognise that competence develops over time, and that an architect may work 'competently' at many different levels, either at different stages of their career, or depending on the nature of the work they are carrying out.

What you need to do

It is essential that you remain current with developments in the profession, the construction industry and the wider environment in which you work.

What you will need to do to maintain your competence will vary in relation to your role, current degree of competence, and career progression. A good place to start will be to consider the competence standards architects should meet in respect of sustainable design, and reflect on how these relate to your professional circumstances.

Once you have identified your development needs you should undertake learning in the way that best suits you. This can be done in a variety of ways, but such development will have at its core an informal learning through the challenges and opportunities of working life, and interaction with colleagues, clients, and professionals from other disciplines. This may be supplemented by structured activities such as training events, courses, distance learning programmes and private study.

It is important that you record the development activity you have undertaken. This will allow you to demonstrate that you have dealt with your learning needs, and identify areas for further development.

Resources

The resources available that contribute to keeping current are constantly changing. Professional and commercial organisations provide targeted, structured training and CPD events. Architects should keep up-to-date with changes in legislation, professional and statutory duties by reference to relevant online resources from professional and statutory bodies.

We do not recommend any particular learning route or resource, but you can find further information on educational tools and resources on our website [here](#).

Competence guidelines on sustainable practice

A. ETHICS AND PROFESSIONALISM

You should:

- SA1. Understand the principles of climate science so that you are able to make informed and responsible decisions with regards to actions and inaction that may affect this issue
- SA2. Understand the impact that resilience, mitigation and adaptation of the built environment can have on climate change, and do everything within your remit to minimise the negative impact your practice has on the environment
- SA3. Advocate for sustainable or regenerative design solutions and ethical sourcing throughout the life-cycle of each project
- SA4. Maintain your knowledge of the key legislation, regulations and policies in respect of the climate and ecological crisis
- SA5. Share building performance data to raise industry awareness and encourage the growth of a zero carbon culture

B. SUSTAINABLE DESIGN PRINCIPLES

You should:

- SB1. Understand the relationships between buildings, settlements, communities and a changing climate, and be able to design low and zero carbon buildings
- SB2. Understand social sustainability and social value as tools to measure the impact of development upon communities
- SB3. Be able to design to preserve, integrate and enhance natural habitats which encourage biodiversity and support access to green infrastructure space for communities
- SB4. Be able to apply the design principles of:
 - Retrofit First
 - Fabric First and thermal/energy efficiency
 - Passive Design
 - Daylighting
 - Appropriate renewable technologies
 - Life Cycle Assessment and Costing
 - Whole Life Carbon & Low embodied carbon design
 - Water cycle, demand, supply and reduction

C. ENVIRONMENTAL & BUILDING PHYSICS

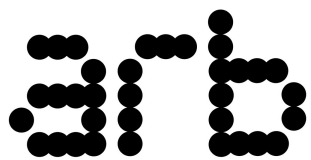
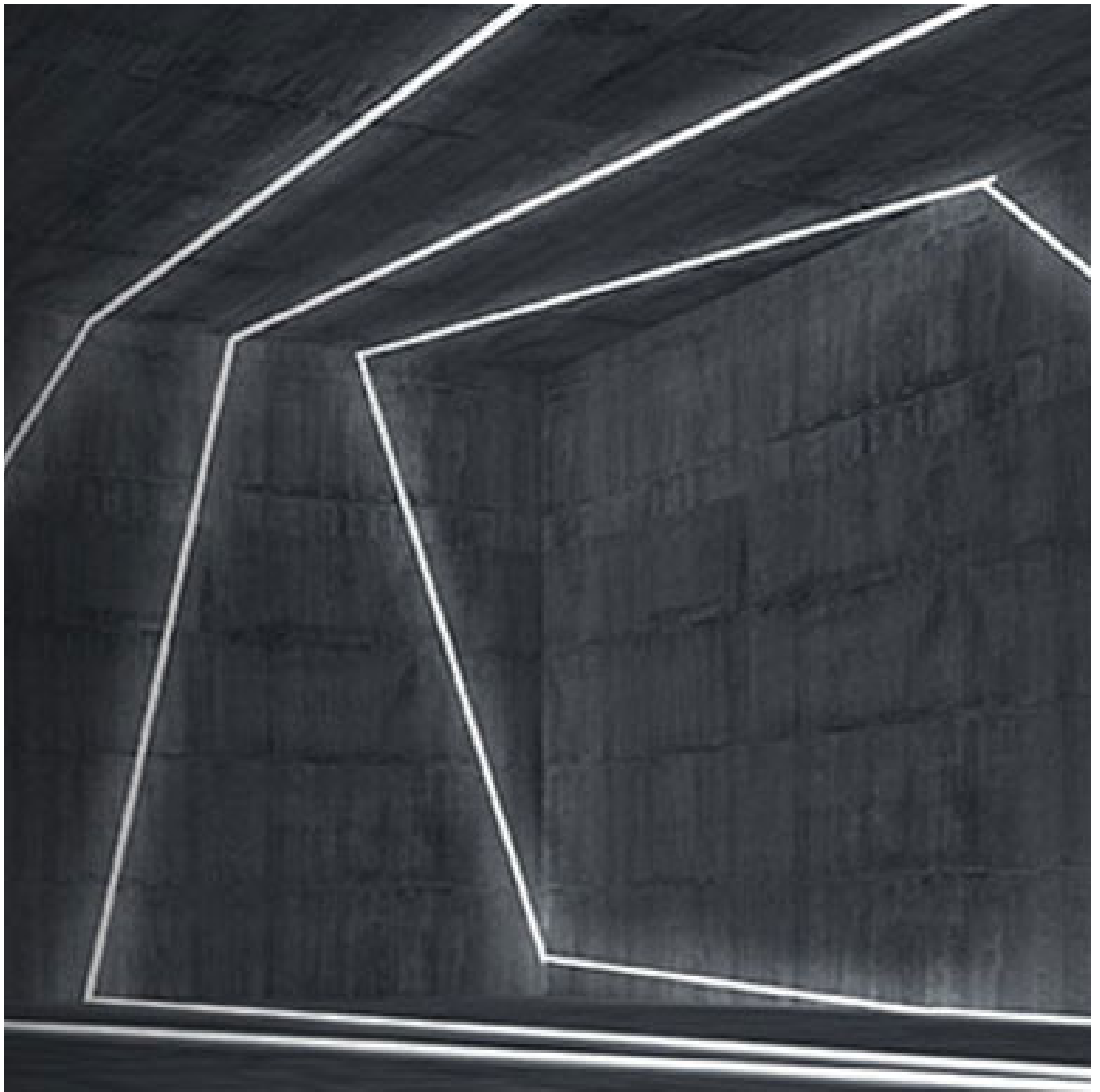
You should:

- SC1. Understand the environmental science relating to temperature, humidity, sound and lighting
- SC2. Understand the principles of human comfort and indoor air quality in relation to energy use
- SC3. Be able to calculate predicted operational and embodied energy use and carbon emissions
- SC4. Be able to carry out Post Occupancy Evaluations / Building Performance Evaluations to understand performance gaps and inform future projects

D. CONSTRUCTION TECHNOLOGY

You should:

- SD1. Understand the embodied carbon and resource implications of different methods of construction and performance of building materials
- SD2. Be able to produce adequate detailed designs to allow for airtightness and thermal integrity
- SD3. Understand the performance of major energy demanding building technologies (ventilation, heating, cooling, hot water and lighting), and the use of onsite renewable energy generation or further offsetting to achieve decarbonisation.
- SD4. Understand and be able to apply circular economy principles to the design life-cycle of each project



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Registration
Board**

For more information please contact
the Architects Registration Board
8 Weymouth Street, London W1W 5BU
Web: www.arb.org.uk
Email: info@arb.org.uk
Telephone: +44 (0) 20 7580 5861
Fax: +44 (0) 20 7436 5269