TOP TIPS FOR EMBEDDING CIRCULAR ECONOMY PRINCIPLES IN THE CONSTRUCTION INDUSTRY
01. Advise your client

Proactively identify where the project could benefit from circular economy design approaches and advise your client. For example, greater use of reused and recycled products (providing it does not increase environmental impact), material efficient design, design to enable ease of maintenance and upgrade, design for adaptability and deconstruction, use of different business models etc.
Include the circular economy in design reviews

During the key stages of your practice’s design review process, assess how well the design and specification addresses circular economy principles, and identify further opportunities for improvement.
Engage with manufacturers

Manufacturers have their own programmes of innovation, and talking to them early in the design process may provide opportunities you have not thought of. Ask manufacturers what actions they are taking to embed circular economy thinking in their product offer.
Align with the design life

Identify the design life your client has set for the building/asset and the different ‘layers’ of the building/asset (e.g. bridge structure 120 years, pavement 20 years). Align your design accordingly: identify the appropriate circular economy design principles for the lifecycle length. This should lead to material efficient design, less waste and higher levels of reuse over the building/asset’s 2nd, 3rd, 4th life etc.
Design for ease of maintenance and upgrade

Design for ease of future maintenance and upgrade work on the main elements, e.g. structure and services, to prolong the life of the building/asset and avoid waste. Ideally, asset managers/facilities managers and end uses should be engaged to help inform the design and specification from a maintenance perspective.
Does your design brief include designing to enable future flexibility and reconfiguration of the building/asset? Think about the lifecycle of what you are designing. Consider if it is appropriate and possible to design for future flexibility, to enable reconfiguration and reuse. Demonstrate the benefits of this approach to your client.
07.

Design for deconstruction

Does your design brief include designing for deconstruction? This is commonplace for temporary buildings/assets, but at present, rare for permanent buildings/assets. Designing for deconstruction enables reuse of the whole building/asset, or individual components and materials at the end of life. Investigate for instance bolted connections and fixings, which enable easier dismantling and reuse.
Top Tips for Embedding Circular Economy Principles in the Construction Industry

This resource is intended to help the construction industry start its journey towards the circular economy. It offers a series of practical tips - for Clients, the Design Team, Contractors, Material and Product Manufacturers, and Demolition Contractors. Those who have already developed and are practicing a sophisticated approach to circular economy may find these tips useful as a checklist.

Read more about it on the website: www.cetoptips.com

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