

EDWARD CULLINAN:



SUSTAINABLE

ARCHITECT

LONDON, ENGLAND

PROPOSITION:

Prominent architect,
Edward Cullinen,
practices green architecture



PROVEN BY SOURCES FROM:
www.edwardcullinanarchitects.com
www.archdaily.com
www.archello.com
www.architecture.com/theRIBA
www.epa.gov
www.ecolife.com

EDUCATIONAL BACKGROUND:

- Cambridge University
- The Architectural Association
- The University of California, Berkeley

WORK BACKGROUND:

- Founded his practice, Edward Cullinan Architects, in 1965
- Is a visiting professor at the University of Nottingham
- Professor at the Bartlett (1978-1979)
- Professor at Sheffield University (1985-1987)
- Professor at Massachusetts Institute of Technology (1985)
- Professor at Edinburgh University (1987-1990)

INDIVIDUAL AWARDS:

- Royal Institute of British Architects Royal Gold Medal 2012
- ECA has won a combined 56 awards since 2002



SUSTAINABILITY DEFINED:

[SUSTAINABLE DESIGN]

"Sustainable design is the intention to reduce or completely eliminate negative environmental impacts through thoughtful designs. This concept can be applied across all fields of design such as designing buildings or products. A sustainable design, regardless of the application, will seek to incorporate environmentally-preferable outcomes influencing:

- Lower & limit consumption of energy, water and resources
- Minimal impact on climate change and local ecosystem
 - Reduce amount of waste
- Emphasize quality & durability over price"

(www.ecolife.com)

CULLINAN DESIGN PHILOSOPHY

"This practice has spent the last 40 years working out how to best incorporate **sustainability** into its designs. The result is a philosophy of developing "long-life, loose fit, low energy" buildings...The firm is also committed to **social sustainability**. Most of its projects have a benefit for those people in society who need it most. Cullinan has, from its foundation in 1965, sought an architecture in which the environmental design forms a vital part of a **holistic approach** to building production. We collaborate with the best **environmental designers** and engineers to maintain our commitment to sustainable design and research. An **Environmental Management System** combines the remits, targets and programme for our approach to sustainable work - in both how we work and the projects we design. We have **ISO 14001 accreditation** which serves to enforce our commitment to a sustainable lifestyle."

- The Cullinan Studio



CULLINAN DESIGN PHILOSOPHY

Each project addresses common interests of:

1. Social and Physical Adaptability:

A positive response to the historical and physical content

2. Knowledge of Necessary Spaces:

An understanding of the importance of good public spaces

3. Implementation of the Users' Unique Needs:

A belief that consultation and participation by the users forms an essential part of an effective design process

4. Flexibility through Quality Design:

An appropriate degree of flexibility to allow for changing patterns of use and continually developing needs of technology

5. Sustainable Design:

A continually developing focus on energy conservation and sustainability

6. Healthy Process, Healthy Structure:

An enjoyment in the construction of the buildings as an integral part of their architecture



CULLINAN DESIGN PHILOSOPHY

	Doesn't Address		Meets Requirements		Exceeds Requirements
1. Social/Physical Adaptability	Doesn't fit in with surroundings		Doesn't alter surroundings in a good/bad way		Enhances Surroundings
2. Knowledge of Necessary Spaces	No knowledge of program		Minimum knowledge of program		Uses immense knowledge to improve design
3. Implementation of the Users' Unique Needs	Doesn't address the user's needs		Addresses the user's minimal needs		Addresses the user's needs in a sustainable way
4. Flexibility through Quality Design	Makes the structure for singular use		Makes the structure for minimal uses		Makes the structure with anticipation of future uses
5. Sustainable Design	Not sustainable		A few sustainable implementations		Is a self-sufficient structure
6. Healthy Process, Healthy Structure	Poor design & construction process		A "safe" design (no design challenges)		Challenging process/ challenging design, creating a healthy, sustainable structure

RMC INTERNATIONAL HEADQUARTERS:

	Doesn't Address		Meets Requirements		Exceeds Requirements	
1. Social/Physical Adaptability	Doesn't fit in with surroundings		Doesn't alter surroundings in a good/bad way		Enhances Surroundings	Involves the provided system while combining it with the green redesign
2. Knowledge of Necessary Spaces	No knowledge of program		Minimum knowledge of program		Uses immense knowledge to improve design	Uses knowledge of that time to improve structure. Past knowledge isn't as advanced as current
3. Implementation of the Users' Unique Needs	Doesn't address the user's needs		Addresses the user's minimal needs		Addresses the user's needs in a sustainable way	Turns the program into a green program, enhancing the space
4. Flexibility through Quality Design	Makes the structure for singular use		Makes the structure for minimal uses		Makes the structure with anticipation of future uses	Makes structure functional, with easy maintenance through new green technologies
5. Sustainable Design	Not sustainable		A few sustainable implementations		Is a self-sufficient structure	Not completely self-sufficient, but is a passive design
6. Healthy Process, Healthy Structure	Floor design & construction process		A "safe" design (no design challenges)		Challenging process/creating a healthy, sustainable structure	Added challenges to the design and solved them through sustainable means

This structure practices **SUSTAINABLE DESIGN**

GREEN BUILDING PRECEDENT [2]

Project: BFI Master Film Store

Location: Warwickshire

Completed: 2011

PROJECT QUALITIES:

- Preserves the British Film Institute's master film collection (450,000+ canisters)
- Received a RIBA Award, RIBA Regional Building of the Year Award, BCI Awards Building Project of the Year, AIA Excellence in Design Award, among others
- Storage cooling system consists of 35% relative humidity and is highly insulated and air-tight to keep the internal environment using minimal energy
- Achieved a BREEAM 'Excellent' rating



Photo: Edin



RMC INTERNATIONAL HEADQUARTERS:

	Doesn't Address		Meets Requirements		Exceeds Requirements	
1. Social/Physical Adaptability	Doesn't fit in with surroundings		Doesn't alter surroundings in a good/bad way		Enhances Surroundings	Enhances the landscape by using green materials in combination with soft metal and concrete facades
2. Knowledge of Necessary Spaces	No knowledge of program		Minimum knowledge of program		Uses immense knowledge to improve design	Uses new technology to verify the problem and improve its quality
3. Implementation of the Users' Unique Needs	Doesn't address the user's needs		Addresses the user's minimal needs		Addresses the user's needs in a sustainable way	Addresses the needs of the project through means of sustainable design
4. Flexibility through Quality Design	Makes the structure for singular use		Makes the structure for minimal uses		Makes the structure with anticipation of future uses	While this building is the only one of its kind, it can potentially have other functions
5. Sustainable Design	Not sustainable		A few sustainable implementations		Is a self-sufficient structure	While not completely self-sufficient, it features excellent use of sustainable design
6. Healthy Process, Healthy Structure	Floor design & construction process		A "safe" design (no design challenges)		Challenging process/ challenging design, creating a healthy, sustainable structure	Addressed the user's issue in a sustainable way, creating an essentially energy-neutral structure

This structure practices **SUSTAINABLE DESIGN**

