

Upfront Carbon (A1-A5) Summary

Project Citizens Theatre
Typology Culture (Theatre)
Location Glasgow, UK
GIA 7,300 m²

RIBA Workstage RIBA Stage 5
Calculation Method Other RICS Aligned (External)
Prepared by Cundall (10.2021)
Checked by BH (12.2021)

Project Overview

The Citizens Theatre is historic venue in the Gorbals area of Glasgow. It houses a Grade B listed auditorium has had several redevelopments prior to the current works. The scope includes improvements to the auditorium and stage house along with a new flytower. The assessment was undertaken by Cundall for the Net Zero Theatres Study in 2021 using Stage 5 level of information. The A1-A5 results below are aligned to LETI's reporting template.

		Embodied Carbon per Module per Building Element (kgCO ₂ e/m ² GIA)								
Building Element		A1-A3	A1-A3 (Seq.)	A4	A5	A1-A5	% Cont.	Contingency	Notes / Comments	
Demolition	Toxic Material Treatment	-	-	-	-	0	6	0	Excluded from Total	
	Major Demolition Works	-	-	-	-	0	6	0	Excluded from Total	
Facilitating Works	Temporary/ Enabling Works	-	-	-	-	0	6	0		
	Specialist Ground works	-	-	-	-	0	6	0		
Substructure	Substructure	-	-	-	-	96	6	6		
Superstructure	Frame	-	-	-	-	112	6	7		
	Upper Floors	-	-	-	-	37	6	2		
	Roof	-	-	-	-	50	6	3		
	Stairs and Ramp	-	-	-	-	13	6	1		
	External Walls	-	-	-	-	32	6	2		
	Windows and External Doors	-	-	-	-	13	6	1		
	Internal Walls and Partitions	-	-	-	-	67	6	4		
	Internal Doors	-	-	-	-	2	6	0		
Finishes	Wall Finishes	-	-	-	-	3	6	0		
	Floor Finishes	-	-	-	-	21	6	1		
	Ceiling Finishes	-	-	-	-	20	6	1		
FF&E	FF&E (Fixed)	-	-	-	-	4	6	0		
	FF&E (non-fixed)	-	-	-	-	0	6	0	Excluded from Total	
Building Services	Building Services	-	-	-	-	98	6	6		
	Renewable Electricity Generation	-	-	-	-	0	6	0	Excluded from Total	
Works to Existing Building	Pre-fab Building Units	-	-	-	-	0	6	0		
	Minor Demolition and Alterations	-	-	-	-	0	6	0		
External Works	External Works	-	-	-	-	2	6	-	Excluded from Total	
Site (A5)	Site Activities	-	-	-	-	-	6	-	A5 included within each total.	
SUBTOTAL		N/A	N/A	N/A	N/A				[1] Contingency	
TOTAL A1-A5						567	+	34	kgCO ₂ e/m ²	

Summary and Comparison to LETI Benchmark

Upfront Carbon	D	601	kgCO ₂ e/m ²	(A1-A5) Excludes Sequestration
Sequestered Carbon		N/A	kgCO ₂ e/m ²	(A1-A3)

Additional Notes

[1] Contingency was retrospectively applied retrospectively at a rate of 6% across all reported categories in line with RICS v.2 (2023) Recommendations for construction stage assessments.