## Bennetts Associates

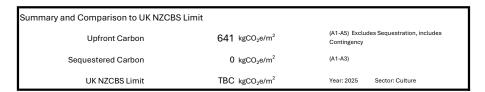
## Upfront Carbon (A1-A5) Summary

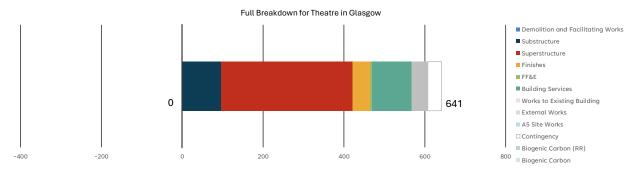
Project Theatre in Glasgow Typology Culture (Performance) Location Glasgow, UK GIA 7,306 m<sup>2</sup> NIA (Existing | New) 3,200 m<sup>2</sup> | 4,106 m<sup>2</sup> RIBA Workstage RIBA Stage 5
Calculation Method Other RICS Aligned (External)
Prepared by Cundall (10.2021)
Checked by HS (10.03.2025)

## Project Overview

The project is a historic venue in the Gorbals area of Glasgow. It houses a Grade B listed auditorium has 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.

	Upfront Carbon per Module per Building Element (kgCO <sub>2</sub> e/m <sup>2</sup> GIA)								
	Building Element	A1-A3	A1-A3 (Seq.)	A4	A5.3	A1-A5	% Cont.	Contingency	Notes / Comments
Demolition and Facilitating Works	Toxic Material Treatment	0.0	0.0	0.0	0.0	0	6	0	
	Major Demolition Works	0.0	0.0	0.0	0.0	0	6	0	
	Facilitating Works	0.0	0.0	0.0	0.0	0	6	0	
Substructure	Foundations and piling	_	_	_	_	96	6	6	Substructure reported in aggregate
	Retaining walls / lowest slab								total.
Superstructure	Frame	-	-	-	-	112	6	7	
	Upper Floors	-	-	-	-	37	6	2	
	Roof	-	-	-	-	50	6	3	
	Stairs and Ramp	-	-	-	-	13	6	1	
	External Walls and Roof Finish	-	-	-	-	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	-	-	
Building Services	Building Services	-	-	-	-	98	6	6	
	Renewable Energy Generation	0.0	0.0	0.0	0.0	0	6	0	Excluded from Scope for Sector
Works to Existing Building	Pre-fab Building Units	0.0	0.0	0.0	0.0	0	6	0	
	Minor Demolition and Alterations	0.0	0.0	0.0	0.0	0	6	0	
External Works	External Works	-	-	-	-	2	-	-	Excluded from Scope for Sector
A5 Site Works	A5.1 Demolition	-	-	-	-	-	-	-	
	A5.2 Site Activities	-	-	-	-	-	-	-	Included in A1-A5 totals.
	A5.4 Workers and Transport	-	-	-	-	-	-	-	Not reported (optional)
	SUBTOTAL	N/A	0	N/A	N/A	567	+	34	
	NZCBS Scope Uplift (if reqd.)					40			Uplift for loose FFE.
	TOTAL A1-A5					607	+	34	kgCO <sub>2</sub> e/m <sup>2</sup> GIA





## **Additional Notes**

[1] Major demolition is not included in the total when aligning to NZBCS reporting. In theory, this is accounted for in the C stages of the existing buildings life rather than the A stages of the new building.

 $[2] \ Contingency \ was \ applied \ retrospectively \ at \ a \ rate \ of \ 15\% \ across \ all \ reported \ categories \ in \ line \ with \ RICS \ v. 2 \ 2023) \ Recomendations.$