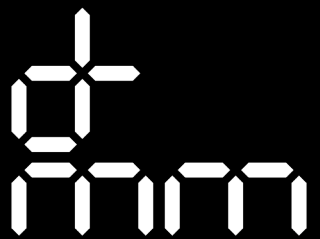


East Ham Old Fire Station



ASBP The Alliance
for Sustainable
Building Products

PROJECT CATEGORY 

ASBP 2024
AWARDS 



- Reinvention of the former Grade II Listed Fire Station in East Ham into 7 affordable homes and a commercial unit
- £2 million budget, conservation architecture ≠ luxury
- Low impact interventions and sensitive repairs, within strict conservation guidelines

Client- Populo Living
Contractor- T&B Contractors
Structure and Civil- Momentum
PM & Cost- Airey Miller
Fire and BC- Wilkinsons
Planning- DP9
MEP- SGA
Heritage- Heritage Collective
Acoustics- KP Acoustics



Whole life carbon

Focus on preserving existing structures, achieving LETI A for Upfront Carbon and LETI B for whole-life cycle Embodied Carbon respectively, surpassing RIBA 2030 targets by 17%. Localised repair and replacement strategy to minimise upfront emissions: patch roof repairs, refurbishing window, maintaining majority of original structure



Technical performance

Performance improvements limited by budget, listed status and Part L requirements. Clever and strategic integration of enhancements, i.e. adding insulation during roof replacement. Resulting energy use generally meets Part L 2013.



Social value

Reinventing a heritage asset to reconnect it to the community and the High Street and provide much needed affordable housing



Health and well-being

Retrofit with a focus on making a healthier environment; with improved air quality, thermal comfort and acoustics
Removing unhealthy materials and adding in healthy new materials



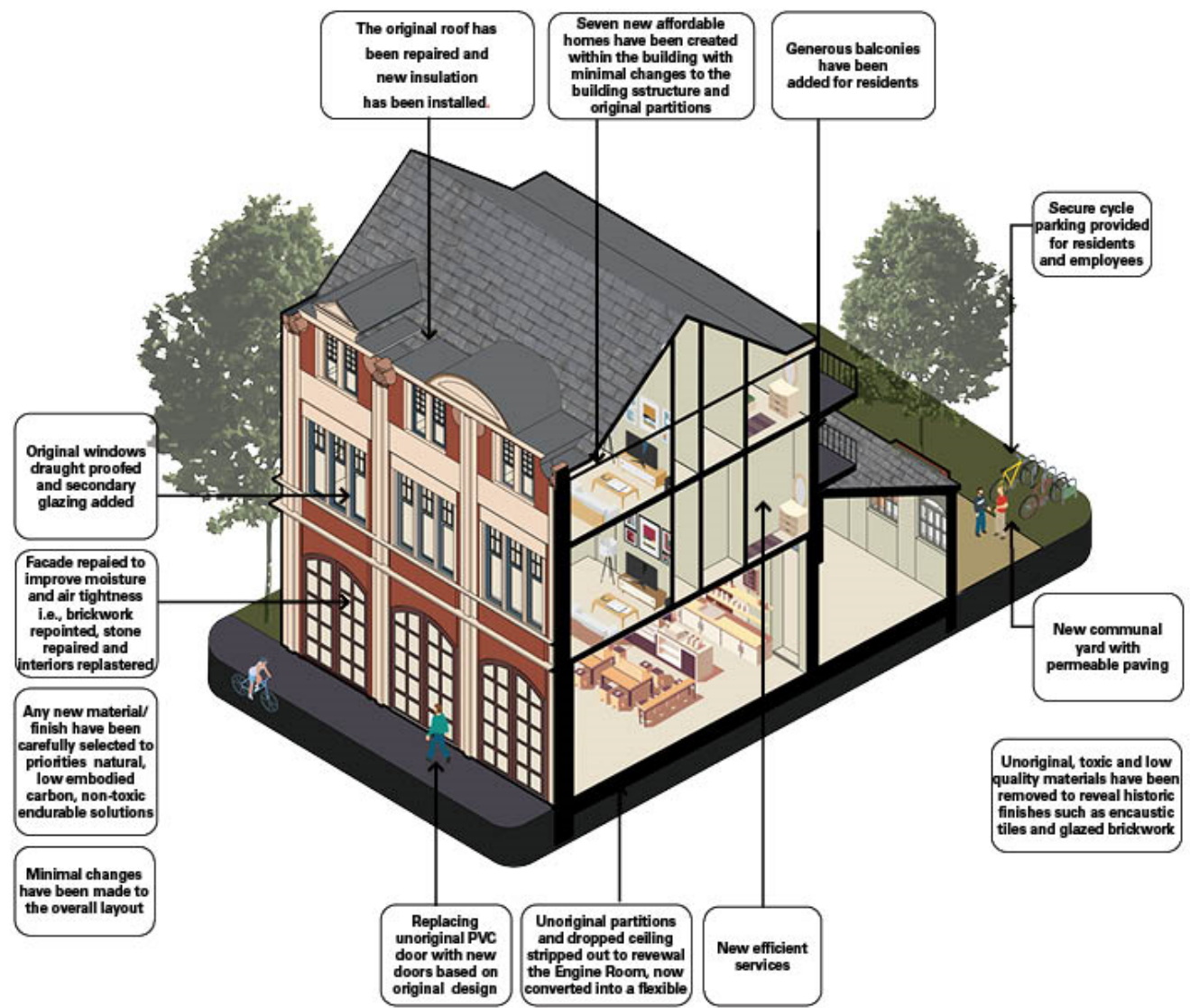
Resource efficiency

Sensitive repurposing without carbon-heavy demolition, retaining original structures and surfaces such as preserving original partitions and materials (caustic tiles, handrails,



Ethics and transparency

dRMM fostered a collaborative working relationship with Populo. Novation to T&B allowed transitioning of project knowledge into construction phase, crucial when working with existing, listed building



Project Name	East Ham Fire Station	Upfront Embodied Carbon	A1-5 exc. sequestration (kgCO ₂ e/m ²)	Life Cycle Embodied Carbon	A1-5, B1-5, C1-4 (kgCO ₂ e/m ²)
Project Sector	Residential (6+ storeys)				
Assessment Date	05/01/2023				
Assessment By (company)	Cundall				
Location of Data	-				
A++	100	150			
A+	200	300			
A	300	450	A 283		
B	400	625		B 525	
C	500	800			
D	675	1000			
E	850	1200			
F	1000	1400			
G					
Non-Listed Typology:					
Sequestered Carbon:		-13 kgCO₂e/m²			
Module D:		-48 kgCO₂e/m²			





Heritage retrofit for social housing is rare. The project democratises conservation architecture and challenges the assumption that it is an expensive undertaking. It offers an accessible and affordable framework for the adaptive re-use of civic heritage assets showing how this most sustainable form of architecture might be applied to addressing the housing crisis.