



Programme Area: Buildings

Project: Building Supply Chain for Mass Refurbishment of Houses

Title: Appendix 1 – Survey Process Map

Abstract:

Please note this report was produced in 2011/2012 and its contents may be out of date. This document is an appendix of Deliverable 4.2 – Draft Supply Chain Scenarios.

Context:

This project looked at designing a supply chain solution to improve the energy efficiency of the vast majority of the 26 million UK homes which will still be in use by 2050. It looked to identify ways in which the refurbishment and retrofitting of existing residential properties can be accelerated by industrialising the processes of design, supply and implementation, while stimulating demand from householders by exploiting additional opportunities that come with extensive building refurbishment. The project developed a top-to-bottom process, using a method of analysing the most cost-effective package of measures suitable for a particular property, through to how these will be installed with the minimum disruption to the householder. This includes identifying the skills required of the people on the ground as well as the optimum material distribution networks to supply them with exactly what is required and when.

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Pre Site External

Utility Databases	Utility Connections ^V	Service Penetrations <i>All Utilities</i>
Google GIS	Orientation NSEW	Trees Access Shading ^V
	Property Type Semi/Terraced/ Etc.	Number of External Walls ^V
	Property Footprint	Roof Type Flat etc. Solar/roof lights Pitch/Chimney ^V
Local Authority	Listed Status AONB etc.	Radon/ Asbestos
	Second Floor? Fire Escape	Property Type Semi/Terraced/ Etc.
	Flying Freeholds LA Data?	Exclusion to survey e.g. EWI in conservation area ^V
	Planning & conservation restrictions	Retain extension distinction for planner or smooth off?
Other Commercial	Rent-A-Roof	
Householder Owner	Loft Conversion Trigger Y/N?	

Drive by Park

General	Access ^V	Overhead Services
	General Condition MEWP/Access	
	Plan Survey (Need a camera on a pole?)	
First Elevation		Flues
	Guttering Eaves & Gable Detail ^V	
	Doors ^V	
	Wall Finish (On Street ?)	
	Abutments ^V	

On site

Visual Survey	Ground Level	
Scan & Photo ▪Elevation ▪Perspective ▪Accuracy ~2mm	Wall detail Moulding Sill depth M²	Resolution good enough for eaves detail? ^V
Access ▪Restrictions ▪Vegetation ▪Basement grills	Garage access Temporary?	Basement Y/N
Rendering Flatness Facing condition	Cavity Vents	Lintel/Sill Condition Visual/photo (resolution)
Doors Security/Letters/ Animal flaps/ bells/video/spy	Materials Wood PVC Metal	Bays ▪Standard replacement units?
Entry Adaptations	Types Opening in/out Sliding/Porch/ Glazing	Sloping ▪Flashing detail Dormers ▪Window or unit
Glass access ▪Single door ▪Heritage/design detail/function	Glass ▪Safety ▪Self cleaning ▪Coatings	Glass tester? Leaks Locks
# Windows & condition ▪Rule-of-thumb for Sash c'weight	Damp indicators ▪Leaky gutters, overflows etc.	Security locks Alarm link - Value Added! Fire egress
Adjacent properties Colours / design	Match to intent and Photo Create 3D Model ^V	Passages Pavements
Services confirmation ^V	Penetrations ▪Flues cable TV waste, water etc. Satellite dishes	Infestation Birds/Bats/insect
Suitability for scaffold or platform		
Visual Survey	Gutter Level	
Mixed type Roof Pitch Confirm roof covering	Junctions Valley gutter Hips / Dutch Gable / dormer	Ventilation (Cold roof) ^V ▪Soffit/gable/ Ridge tile
Flat roof Ponding /ageing Green roof Garden roof	Chimney flashing Aerials & Satellite dishes	
Technical Survey	Element Test	
Airt Infiltration Room-by-room Pressure test too much?	Timber moisture content ^C	DPC ▪Location
Pull-out test Necessary (if solid)?	Potential below ground excavation	Guttering Eaves/Gable detail
Technical Survey	Structural Test	Imaging Sonar/X-ray /NMR
Structural integrity Change of wall type (joint)	Wall tie condition What's the risk? ^C	Cold bridges ▪Structure ▪Balcony
Technical Survey	Property Specific Test	
High Rise ▪Services ▪Lifts ▪Plant	Fixtures for mechanical plant Window cleaning etc.	
Household Onsite Survey		
Cavity treatment ▪History ▪Performance	Warn or Cold Tepid!	Conservatory to house Thermal Bridge