

Annex J - Proof of cost justification

Savills has reviewed tendered and outturn costs associated with the SHDF Demonstrator, SHDF Wave 1 and SHDF 2.1 projects to provide a grounding on market trends. These are included in pages 1-3. The trends over the past three to four years show the volatility experienced in the market place, however through further market stress-testing the prices over the past 12 months appear to have stabilised. Therefore, to reflect current market conditions, the rates contained within the bid are purely based on the average contractor prices received and agreed with Savills as part of the recent SHDF Wave 2.1 projects. Only the internal wall insulation rate has been increased due to the change in specification and the need to provide a comfort frame system in order to meet Trustmark requirements and minimise tenant disruption. Page 4 shows the application of the agreed rates to the properties based on the survey data in order to produce cost estimates.

Measure Code	Main Component	Description	Unit Type	Contractor 1 - Wave 2.1 Inc. On Costs	Contractor 2 - Wave 2.1 Inc. On Costs	Contractor 3 - Wave 2.1 Inc. On Costs	Average Wave 2.1 Inc. On Costs	Bid Rate	Notes
S1	Scaffold access requirements	Full scaffold to front and back of houses / maisonettes	/m2	£25	£22	£24	£24	£24	As per average
S2	Scaffold access requirements	Intermediate scaffold - for single measures - external walls, windows or single storey dwellings (low rise)	/m2	£25	£22	£24	£24	£24	As per average
S4	Scaffold access requirements	Provide scaffold access associated with Solar PV / Solar Water Heating only (low rise 2-3 stories)	/m2	£25	£22	£24	£24	£24	As per average
W1	External Wall Area - Type 1	Cavity fill - EPS Beads + Binder (Springvale EcoBead)	/m2	£28	£24	£26	£26	£26	As per average
W6	External Wall Area - Type 1	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W6T	External Wall Area - Type 1	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W4	External Wall Area - Type 1	Internal wall insulation (IWI)	/m2	£133	£145	£188	£155	£290	Rate uplifted to reflect change in specification to comfort frame system in order to meet Trustmark requirements and minimise tenant disruption.
W1A	External Wall Area - Type 1 ALT	Cavity fill - EPS Beads + Binder (Springvale EcoBead)	/m2	£28	£24	£26	£26	£26	As per average
W6A	External Wall Area - Type 1 ALT	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W6AT	External Wall Area - Type 1 ALT	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W4A	External Wall Area - Type 1 ALT	Internal wall insulation (IWI)	/m2	£133	£145	£188	£155	£290	Rate uplifted to reflect change in specification to comfort frame system in order to meet Trustmark requirements and minimise tenant disruption.
W1.2	External Wall Area - Type 2	Cavity fill - EPS Beads + Binder (Springvale EcoBead)	/m2	£28	£24	£26	£26	£26	As per average
W6.2	External Wall Area - Type 2	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W6.2T	External Wall Area - Type 2	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W4.2	External Wall Area - Type 2	Internal wall insulation (IWI)	/m2	£133	£145	£188	£155	£290	Rate uplifted to reflect change in specification to comfort frame system in order to meet Trustmark requirements and minimise tenant disruption.
W1.2A	External Wall Area - Type 2 ALT	Cavity fill - EPS Beads + Binder (Springvale EcoBead)	/m2	£28	£24	£26	£26	£26	As per average
W6.2A	External Wall Area - Type 2 ALT	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W6.2AT	External Wall Area - Type 2 ALT	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W4.2A	External Wall Area - Type 2 ALT	Internal wall insulation (IWI)	/m2	£133	£145	£188	£155	£290	Rate uplifted to reflect change in specification to comfort frame system in order to meet Trustmark requirements and minimise tenant disruption.

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W1.3	External Wall Area - Type 3	Cavity fill - EPS Beads + Binder (Springvale EcoBead)	/m2	£28	£24	£26	£26	£26	As per average
W6.3	External Wall Area - Type 3	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W6.3T	External Wall Area - Type 3	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W4.3	External Wall Area - Type 3	Internal wall insulation (IWI)	/m2	£133	£145	£188	£155	£290	Rate uplifted to reflect change in specification to comfort frame system in order to meet Trustmark requirements and minimise tenant disruption.
W1.3A	External Wall Area - Type 3 ALT	Cavity fill - EPS Beads + Binder (Springvale EcoBead)	/m2	£28	£24	£26	£26	£26	As per average
W6.3A	External Wall Area - Type 3 ALT	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W6.3AT	External Wall Area - Type 3 ALT	External wall insulation (EWI)	/m2	£377	£244	£249	£290	£290	As per average
W4.3A	External Wall Area - Type 3 ALT	Internal wall insulation (IWI)	/m2	£133	£145	£188	£155	£290	Rate uplifted to reflect change in specification to comfort frame system in order to meet Trustmark requirements and minimise tenant disruption.
R1	Roof Area	Top up insulation to 400mm mineral fibre (between/over joists in loft).	m2/100mm thickness	£31	£24	£15	£23	£23	As per average
R4	Roof Area	150 mm PU between rafters (and re-line)	/m2	£172	£176	£180	£176	£176	As per average
R7	Roof Area	200 mm PU on flat roof and refinish	/m2	£307	£287	£339	£311	£311	As per average
R10	Roof Area	Boarded loft space (3 sq.m)	/item	£234	£185	£181	£200	£200	As per average
R1.2	Roof Area Type 2	Top up insulation to 400mm mineral fibre (between/over joists in loft).	m2/100mm thickness	£30	£24	£16	£23	£23	As per average
R1.3	Roof Area Type 3	Top up insulation to 400mm mineral fibre (between/over joists in loft).	m2/100mm thickness	£30	£24	£16	£23	£23	As per average
R4.2	Roof Area Type 2	150 mm PU between rafters (and re-line)	/m2	£172	£176	£180	£176	£176	As per average
R4.3	Roof Area Type 3	150 mm PU between rafters (and re-line)	/m2	£172	£176	£180	£176	£176	As per average
R7.2	Roof Area Type 2	200 mm PU on flat roof and refinish	/m2	£307	£287	£339	£311	£311	As per average
R7.3	Roof Area Type 3	200 mm PU on flat roof and refinish	/m2	£307	£287	£339	£311	£311	As per average
F1	Floor Area Type 1	100 mm PU beneath exposed floor (and re-line)	/m2	£211	£249	£197	£219	£219	As per average
F3/D1	Floor Area Type 1	Q.BOT or insulation between joists	/m2	£175	£156	£175	£169	£169	As per average
F1.2	Floor Area Type 2	100 mm PU beneath exposed floor (and re-line)	/m2	£211	£249	£197	£219	£219	As per average
F3/D1.2	Floor Area Type 2	Q.BOT or insulation between joists	/m2	£175	£156	£175	£169	£169	As per average
F1.3	Floor Area Type 3	100 mm PU beneath exposed floor (and re-line)	/m2	£211	£249	£197	£219	£219	As per average
F3/D1.3	Floor Area Type 3	Q.BOT or insulation between joists	/m2	£175	£156	£175	£169	£169	As per average
x1	Exposed Upper Floor- Building Part 1	Exposed upper floor: Insulation beneath exposed floor (and re-line)	/m2	£175	£156	£175	£169	£169	As per average
x2	Exposed Upper Floor- Building Part 2	Exposed upper floor: Insulation beneath exposed floor (and re-line)	/m2	£175	£156	£175	£169	£169	As per average
x3	Exposed Upper Floor- Building Part 3	Exposed upper floor: Insulation beneath exposed floor (and re-line)	/m2	£175	£156	£175	£169	£169	As per average

Measure Code	Main Component	Description	Unit Type	Contractor 1 - Wave 2.1 Inc. On Costs	Contractor 2 - Wave 2.1 Inc. On Costs	Contractor 3 - Wave 2.1 Inc. On Costs	Average Wave 2.1 Inc. On Costs	Bid Rate	Notes
G5	Window Area	New windows - PVCu frames (Whole unit U=1.2)	/m2	£587	£578	£537	£567	£567	As per average
G5.2	Window Area Type 2	New windows - PVCu frames (Whole unit U=1.2)	/m2	£587	£578	£537	£567	£567	As per average
G13	Number of external doors	New proprietary insulated external door and frame (U=1.0) to outside	/each	£1,890	£1,602	£1,225	£1,572	£1,572	As per average
G14	Number of semi-exposed doors	New proprietary insulated door and frame (U=1.0) to corridor - flats	/each	£1,890	£1,602	£1,224	£1,572	£1,572	As per average
D2	Draught-stripping measures	Proprietary insulated loft hatch	/each	£417	£221	£412	£350	£350	As per average
D3	Draught-stripping measures	Close a chimney (including ventilation)	/each	£632	£645	£622	£633	£633	As per average
D4	Draught-stripping measures	Take out secondary heating	/dwelling	£656	£737	£776	£723	£723	As per average
D6	Draught-stripping measures	Air tightness measures: Air test and remedials	/dwelling	£461	£530	£508	£500	£500	As per average
V7	No. MEV	Install centralised MEV	/each	£3,234	£3,341	£3,218	£3,264	£3,264	As per average
V8	No. MEV	Install decentralised MEV fan(s)	/dwelling	£791	£808	£802	£800	£800	As per average
V1	IEV	Install IEV	/dwelling	£535	£478	£488	£500	£500	As per average
H8AW	Heating system measures	Air Source Heat Pump: Air - Water, MSC	/each	£12,461	£12,027	£11,581	£12,023	£12,023	As per average
H11	Heating system measures	Ground Source Heat Pump: Air - Water, MSC	/each	£17,605	£19,731	£16,733	£18,023	£18,023	As per average
H15	Heating controls measures	New CH+DHW programmer (two zones)	/each	£297	£289	£266	£284	£284	As per average
H16	Heating controls measures	Add thermostatic radiator valves (TRVs)	/each	£96	£99	£96	£97	£97	As per average
H18	Heating controls measures	Programmable Wireless Room Thermostat (Honeywell)	/each	£146	£152	£158	£152	£152	As per average
H23	Heating controls measures	Large Radiators (lower flow temperature)	/each	£491	£512	£504	£502	£502	As per average
HW5	Hot water system measures	Dual immersion cylinder (210 l, 80 mm insuln.), heat pump compatible	/each	£901	£822	£1,007	£910	£910	As per average
LA1	Lights and Appliances	Low Energy Light Bulb(s)	/each	£22	£18	£26	£22	£22	As per average
PV1	Photovoltaics	Photovoltaics (including inverter)	/each	£6,828	£6,879	£7,012	£6,906	£6,906	As per average
HW8	Hot water system measures	Solar water heating system - inc flat plate collector, excludes cylinder	/each	£4,437	£4,604	£4,514	£4,518	£4,518	As per average



Property Level Measures and Cost - Uttlesford Results Summary

Table with columns: Client/UPRN, Address/Line 1, Postcode, Fabric Spend, Heating Spend, Total, Main Component, Description, Unit Type, Rate, Measure, and various cost codes (S1-S11, W1-W6, R1-R11, etc.). The table lists numerous property entries with their associated costs and measures.