

Education Schemes Typical Cost Model New build and Refurbishment

Issue Number 2

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Of interest to providers

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USER GUIDE

The basis upon which each of the cost models have been prepared offers an example of a range of costs which are appropriate to a typical new or refurbished building. Each model is related to a specific geographical location recognising the Skills Funding Agency and Young People's Learning Agency regions of Southern, Central and Northern and are noted and described in respect of the adopted criteria:

- . Gross internal floor area
- . Storey heights
- . General specification
- . Location
- . Procurement route
- . Sustainability standards

Model One	-	Relates to the East and West Midlands, East and South West of England.
Model Two	-	Relates to London and the South East, together with Essex, Hertfordshire and Cambridgeshire*
Model Three	-	Relates to Yorkshire, Humberside and the North East and North West of England.

* Please refer to page 44 for regional identification

The comparison of a Scheme proposal with the appropriate model should be undertaken by a three stage process, namely:

- . Geographical location
- . Identifying whether the scheme broadly relates to the areas, storey heights and general specification of the model
- . Questioning whether the proposed scheme has truly exceptional elements which sit outside the scope of the model

Guidance on such matters is provided hereafter.

The guidelines cannot be fully comprehensive and are not intended to provide a means of assessing every type of scheme.

However they do offer a range of data which provides indicative cost levels for:

- Typical new build projects
- New build model types each relating to an identified geographical location
- Refurbishment schemes reflecting a full, medium or minimal scope of work with each relating to an identified geographical location

Guidance is provided under the principal categories of :

- FE Colleges
- Primary / Secondary Schools
- Small Works Projects (New build extensions)

ACKNOWLEDGEMENTS

This document has been prepared by Davis Langdon LLP, with the guidance and editorial input of the Skills Funding Agency and Young People's Learning Agency.

The original publication date was October 2007 for the Learning and Skills Council.

This amended issue Number 2 is dated October 2011 for the Young People's Learning Agency and Skills Funding Agency.

CHANGES FROM JUNE 2010 (ISSUE NUMBER 1) FOR THE SKILLS FUNDING AGENCY AND THE YOUNG PEOPLES LEARNING AGENCY

- Each model has been updated to reflect present day costs at October 2011 (previously June 2010).
- The typical programme dates have been amended to reflect a October 2011 date for receipt of tender, present day, excluding forward inflation.
- A further cost has been included below the bottom line figure in each of the New Build models to reflect the additional cost for the step up from a Very Good BREEAM rating to an Excellent BREEAM rating. Associated fees and VAT elements are also incorporated, creating a gross increase present day (October 2011).
- Please note the references to VAT legislation which are noted on page 42.

EXECUTIVE SUMMARY

The purpose of the study has been to create cost models which relate to typical new build and refurbishment projects for which an adopted scope and specification has been identified and reflected within the data.

It is recognised that some projects will fall outside the model, creating either a lower or higher outturn cost, being driven by a number of factors, including use, specification and site specifics.

The style of the document is tailored to facilitate ease of use by any assessment panel and is intended to allow submissions to be measured against an expectation, represented by the models, which reflect current market conditions and tender returns recently received and analysed and relating to a number of education based submissions.

The models assume that the current status of tendering is maintained, with zero future inflation or further deflation up to March 2012, but with regular three-monthly reviews taking place.

The models are subject to regular review and update.

Costs are therefore provided for:

- Typical new build schemes representing a majority of projects.
- Typical new build models represented by geographical location.
- Typical refurbishment schemes, identified as being either of full, medium or minimal standard.
- Each of the above are subdivided into FE Colleges, Primary / Secondary Schools and Small Works Projects (New build extensions).

SUSTAINABILITY / RENEWABLES

Costs for Sustainability and Renewables are included within the Model.

BREEAM

Achievement of an Excellent BREEAM rating is to relate to the guidelines provided by the BREEAM Education Model, 2011.

The achievement of BREEAM Excellent relates only to New Build.

For guidance on BREEAM requirements for refurbished buildings please see page 35 "Levels of Refurbishment Standards".

Any proposed departure from BREEAM Excellent should be accompanied by a supporting paper demonstrating an inability to achieve BREEAM Excellent.

Full refurbishment projects are recognised as being able to achieve no more than a 'Very Good' rating.

NEW BUILD AND REFURBISHMENT MODELS

ADOPTED CRITERIA

Brief description of the concept of a typical FE Scheme with New Build development

Location :	Model One – East and West Midlands and the East and South West of England Model Two – London and South East, together with Essex, Hertfordshire and Cambridgeshire Model Three – Yorkshire, Humberside and the North East and North West of England
GIA :	2,000 - 3,000 sq m (measured inside face to inside face of external walls across all service voids and staircases and including floor areas within atria spaces)
Number of Storeys :	2-3
Greenfield/Brownfield:	May be subject to demolition or ground remediation
New Build / Refurbishment:	Yes
Existing Campus or Relocation:	Either
Procurement:	Two stage, design and build or other as appropriate
Date at which stated costs are valid:	Base date, October 2011
General Specification:	New build, offering full range curriculum, 2 storeys high above ground, with up to 2 nr separate or linked buildings, with an envelope comprising a construction of part glazed, rainscreen cladding, brick / render elevations.
Stated costs are Tendered figures, not Final Account September 2011:	Costs represent a second stage final and fixed contractor tender, present day, at October 2011. Costs stated herein are expected to be held for a period up to March 2012, up to start on site and through the construction period (i.e. 0% inflation). Costs beyond March 2012 should be subject to inflation at 1.0% per annum, until further notice.
Further information:	It is assumed that the standards and quality reflected within the model guidances will not be compromised to
Note:	See page 44 for more detailed information for location.

ASSUMED PROGRAMME DATES:

Feasibility:	Start:	January 2011
	Complete:	February 2011
Proposal - Stage C/D :	Start:	March 2011
	Submit:	May 2011
Full Proposal:	Start:	June 2011
	Submit:	August 2011
Start on Site:		October 2011
Phasing:		Two consecutive phases
Completion on Site:		September 2012
Pre Contract Period:		10 months
Post Contract Period:		11 months

NOTE: The model costs are stated at October 2011.

The above relates to a typical project with a construction cost of £5m to £7m.

PROCUREMENT STRATEGY

The model adopts a two stage design and build procurement strategy as the route for producing a firm price from a preferred contractor competitively selected and engaged at stage one.

This represents the basis of costing.

However a project team will submit an alternative proposal where they feel that the interests of the College or other Client body are better served, with a supporting rationale.

The current market place may create circumstances in which single stage tendering may be more advantageous but the benefit of two stage procurement, where the process is correctly applied and managed may still offer benefits.

The benefit of two stage tendering is believed to rest with careful contractor selection, a clear brief and the contractor's full engagement with the selected consultant team.

The strategy will be reviewed on a regular basis.

EXCEPTIONAL ITEMS

Items previously regarded and presented as abnormal are now embodied within the base build cost models herein and will no longer be referred to as 'abnormals'.

Items of a specific exceptional nature relating to site conditions may be considered by the Skills Funding Agency and Local Authority as additional costs outside the model but only if supported by a case study for each item and demonstrating such items as unavoidable and included as representing the most economical approach to accommodate such works, not exceeding 2% of total cost.

CAUTIONARY NOTE

During the process of utilising the data herein it is essential that the assessment of any application for grant funding, or any other purpose, is applied with a recognition and understanding of the proposed schemes, and its specifics, establishing its appropriateness and relationship to the structure of the models.

TYPICAL NEW BUILD COST MODEL / SPECIFICATION

MODEL ONE - TYPICAL FE COLLEGES SCHEME

**East and West Midlands and the East and South West of England.
(Please see page 44 for detailed information for location)**

TYPICAL FE COLLEGES SCHEME – MODEL ONE

Base build costs embracing sustainability items relevant to a 'Very Good' BREEAM rating

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
Demolition	11	0.5	3,000 m ² of two storey buildings, with minor deleterious material content.
Substructure	114	4.7	Excavation and disposal, piled foundations, pile caps, ground beams and ground slab. Poor load bearing ground, minimal contamination.
Substructure Subtotal	125	5.2	
2 Superstructure			
2A Frame	102	4.2	Structural steel beams and columns, fire protected and encased or reinforced concrete beams and columns.
2B Upper Floors	78	3.2	Precast, prestressed reinforced concrete or insitu reinforced concrete or termodeck hollowcore precast planks.
2C Roof	117	4.9	Insitu reinforced concrete with single ply membrane, screed, insulation and associated drainage. Mansafe or equivalent maintenance system.
2D Stairs	23	1.0	Core staircases in precast reinforced concrete with half landings, polyester coated steel balustrades and painted walls, vinyl covered floors and painted ceiling finishes.
2E External Walls	126	5.2	Metal faced rainscreen composite cladding panels to 50% of elevational area with an element of glazed curtain walling. Brise Soleil Brickwork or rendered blockwork to 20% of elevational area.
2F Windows and External Doors	121	5.0	Double glazed windows to 30% of elevational area.
2G Internal Walls and Partitions	79	3.3	Combination of: Glazed screens. Blockwork and solid partitions and twinleaf acoustic wall construction and glazed partitions. Including fire rated areas.
2F Internal Doors	23	1.0	Standard quality solid core doors with laminate or veneer facing in softwood frames. Doors in hardwood frames. Stainless steel ironmongery. Lock suiting and DDA compliant.
Superstructure Subtotal	669	27.9	

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
3 Internal Finishes			
3A Wall Finishes	27	1.1	Combination of: Paint on plastered walls. Paint on fair faced concrete / blockwork. Plasterboard lining and paint, wall tiling, full height to wet areas.
3B Floor Finishes	67	2.8	70 deep screed. Fully accessible raised floor. Edge fixed carpet, hardwood skirtings, limestone tiling. Ceramic tiling. Vinyl flooring, coved skirtings. Epoxy floor paint. Entrance matting and matwells.
3C Ceiling Finishes	25	1.0	Part open ceilings. Plasterboard ceilings on MF framing, emulsion paint finish. Mineral fibre concealed grid ceiling, plasterboard margins and bulkheads. Acoustic treatments.
Internal Finishes Subtotal	119	5.0	
4 Fittings, Furniture and Equipment	49	2.0	External and internal identity, directional and statutory signage. Reception furniture. IT work benches to general teaching spaces. Laboratory work benches. Fume cupboards and other laboratory fittings. Whiteboards, pinboards and other teaching room fittings. Window blinds and vanity units. Retain lockers, shelving and storage racks.
5 Services			
5A Sanitary Installations	9	0.4	WCs and fittings. Extra for disabled fittings. Urinals and fittings. Wash handbasins and fittings. Shower in cubicle, tray, fittings. Classroom sinks, laboratory sinks, cleaners sinks, drinking fountains.
5B Disposal Installation	12	0.5	Waste, soil and vent pipework. Rainwater installations.
5C Mechanical Installation	167	7.0	
Services Equipment	21	0.9	Kitchen, servery and bar fit out.
Hot and Cold Water Installations	13	0.5	Mains water service treatment. Hot water storage and distribution. Cold water storage and distribution.
Space Heating, Air Treatment and Vent.	130	5.4	Space heating via radiators with all supporting plant and distribution. Underfloor heating to the atrium. Part natural, part mechanical ventilation / cooling, opening windows. Extract to toilets and kitchen areas. Air handling units and limited local cooling.
Gas Installation	3	0.1	Incoming gas supply and distribution
5D Electrical Installation	203	8.5	
Electrical Installation	126	5.2	Mains and sub-mains distribution, small power generally, electrical supplies to mechanical plant and equipment, lighting, emergency lighting and external lighting.
Protective Installation	2	0.1	Lightning protection.
Communication Installation	56	2.3	Fire alarm and smoke detection, interface with doorhold system, disabled refuge comms system. Security system, intruder alarm, CCTV, public address. Induction loop. Disabled WC alarm system and data network including containment.
Specialist Installation	19	0.8	BMS controls.

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
5E Lift & Conveyor Installation	19	0.8	2 Nr 10 person lifts to comply with DDA requirements.
5F Builders' Work in Connection	16	0.7	Framing and access platforms in risers. Forming holes and chases etc. 4% M&E costs.
Services Subtotal	426	17.8	
BUILDING SUBTOTAL (1 to 5)	1,388	57.8	
6 External Works			
6A Site Works	70	2.9	
External Works	30	1.2	Landscaping, street furniture, boundaries, infrastructure, pavings, hardstandings, site clearance and on-site roadworks.
Decanting	20	0.8	Provisional allowance of circa £200k.
Planning	20	0.8	Provisional allowance for section 106/278 works and landscaping.
6B Drainage	14	0.6	Foul and rainwater discharge to boundaries of site and manhole chambers, soakaways and connections to buildings.
6C External Services	16	0.7	Incoming services and distribution to buildings.
External Works Subtotal	100	4.2	
7 Preliminaries	179	7.4	Management costs, site establishment and site supervision. Contractor's preliminaries, overheads and profit @ circa 12%. Testing and commissioning of building services installations, O&M manuals.
SUBTOTAL (1 to 7)	1,667	69.4	
8 Contingencies	50	2.1	
Contingency	25	1.0	1.5% allowance.
Design Reserve	25	1.0	Allowance for design development @ 1.5%.

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
9 Equipment	86	3.6	Based upon circa £190 / m ² teaching space. ICT loose plug-in equipment is a revenue item (servers, screens etc.) 30% to be retained for the utilising of legacy equipment.
10 Professional Fees	198	8.3	11% of all costs
SUBTOTAL (1 to 10)	2,001	83.3	
11 VAT	400	16.7	20% of all costs
Total allowance for BREEAM Very Good October 2011	2,402	100.0	

Additional BREEAM Excellent Allowance	Cost Allowance £/m ² October 2011	% Total Base Cost (above)	Typical Specification
Base Cost Allowance for BREEAM Excellent	108	4.5	Cost per m ² allowance to achieve BREEAM Excellent from a base scheme of Very Good.
Preliminaries	13	0.5	Contractor's preliminaries, overheads and profit @ circa 12%.
Contingencies	4	0.2	3% allowance.
Professional Fees	14	0.6	11% of all costs
VAT	28	1.2	20% of all costs
Total allowance for BREEAM Excellent October 2011 over and above base scheme of Very Good	166	6.9	

TYPICAL FE COLLEGES SCHEME – SUMMARY

MODELS ONE, TWO AND THREE

Base build costs embracing sustainability items relevant to a ‘Very Good’ BREEAM rating

Element	Cost Allowance £/m ² October 2011	Location factor	Young People's Learning Agency / Skills Funding Agency Regions
MODEL ONE Total allowance October 2011	2,402	1.00	East and West Midlands and the East and South West of England.
MODEL TWO Total allowance October 2011	2,594	1.08	London and the South East of England, together with Essex, Hertfordshire and Cambridgeshire.
MODEL THREE Total allowance October 2011	2,354	0.98	Yorkshire, Humberside and the North East and North West of England

TYPICAL NEW BUILD COST MODEL / SPECIFICATION

MODEL ONE - TYPICAL PRIMARY / SECONDARY SCHOOL SCHEME

**East and West Midlands and the East and South West of England.
(Please see page 44 for detailed information for location)**

TYPICAL PRIMARY / SECONDARY SCHEME – MODEL ONE

Base build costs embracing sustainability items relevant to a 'Very Good' BREEAM rating

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
Demolition	11	0.5	3,000 m ² of two storey buildings, with minor deleterious material content.
Substructure	114	5.1	Excavation and disposal, piled foundations, pile caps, ground beams and ground slab. Poor load bearing ground, minimal contamination.
Substructure Subtotal	125	5.5	
2 Superstructure			
2A Frame	102	4.5	Structural steel beams and columns, fire protected and encased or reinforced concrete beams and columns.
2B Upper Floors	78	3.5	Precast, prestressed reinforced concrete or insitu reinforced concrete or termodeck hollowcore precast planks.
2C Roof	113	5.0	Insitu reinforced concrete with single ply membrane, screed, insulation and associated drainage. Mansafe or equivalent maintenance system.
2D Stairs	20	0.9	Core staircases in precast reinforced concrete with half landings, polyester coated steel balustrades and painted walls, vinyl covered floors and painted ceiling finishes.
2E External Walls	126	5.6	Metal faced rainscreen composite cladding panels to 50% of elevational area with an element of glazed curtain walling. Brise Soleil Brickwork or rendered blockwork to 20% of elevational area.
2F Windows and External Doors	100	4.4	Double glazed windows to 30% of elevational area.
2G Internal Walls and Partitions	79	3.5	Combination of: Glazed screens. Blockwork and solid partitions and twinleaf acoustic wall construction and glazed partitions. Including fire rated areas.
2F Internal Doors	23	1.0	Standard quality solid core doors with laminate or veneer facing in softwood frames. Doors in hardwood frames. Stainless steel ironmongery. Lock suiting and DDA compliant.
Superstructure Subtotal	641	28.4	

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
3 Internal Finishes			
3A Wall Finishes	27	1.2	Combination of: Paint on plastered walls. Paint on fair faced concrete / blockwork. Plasterboard lining and paint, wall tiling, full height to wet areas.
3B Floor Finishes	61	2.7	70 deep screed. Fully accessible raised floor. Edge fixed carpet, hardwood skirtings, limestone tiling. Ceramic tiling. Vinyl flooring, coved skirtings. Epoxy floor paint. Entrance matting and matwells.
3C Ceiling Finishes	25	1.1	Part open ceilings. Plasterboard ceilings on MF framing, emulsion paint finish. Mineral fibre concealed grid ceiling, plasterboard margins and bulkheads. Acoustic treatments.
Internal Finishes Subtotal	113	5.0	
4 Fittings, Furniture and Equipment	42	1.9	External and internal identity, directional and statutory signage. Reception furniture. IT work benches to general teaching spaces. Laboratory work benches. Fume cupboards and other laboratory fittings. Whiteboards, pinboards and other teaching room fittings. Window blinds and vanity units. Retain lockers, shelving and storage racks.
5 Services			
5A Sanitary Installations	11	0.5	WCs and fittings. Extra for disabled fittings. Urinals and fittings. Wash handbasins and fittings. Shower in cubicle, tray, fittings. Classroom sinks, laboratory sinks, cleaners sinks, drinking fountains.
5B Disposal Installation	14	0.6	Waste, soil and vent pipework. Rainwater installations.
5C Mechanical Installation	141	6.2	
Services Equipment	19	0.8	Kitchen, servery and bar fit out.
Hot and Cold Water Installations	15	0.7	Mains water service treatment. Hot water storage and distribution. Cold water storage and distribution.
Space Heating, Air Treatment and Vent.	104	4.6	Space heating via radiators with all supporting plant and distribution. Underfloor heating to the atrium. Part natural, part mechanical ventilation / cooling, opening windows. Extract to toilets and kitchen areas. Air handling units and limited local cooling.
Gas Installation	3	0.1	Incoming gas supply and distribution
5D Electrical Installation	184	8.2	
Electrical Installation	121	5.4	Mains and sub-mains distribution, small power generally, electrical supplies to mechanical plant and equipment, lighting, emergency lighting and external lighting.
Protective Installation	2	0.1	Lightning protection.
Communication Installation	47	2.1	Fire alarm and smoke detection, interface with doorhold system, disabled refuge comms system. Security system, intruder alarm, CCTV, public address. Induction loop. Disabled WC alarm system and data network including containment.
Specialist Installation	14	0.6	BMS controls.

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
5E Lift & Conveyor Installation	19	0.8	2 Nr 10 person lifts to comply with DDA requirements.
5F Builders' Work in Connection	15	0.7	Framing and access platforms in risers. Forming holes and chases etc. 4% M&E costs.
Services Subtotal	384	17.0	
BUILDING SUBTOTAL (1 to 5)	1,305	57.8	
6 External Works			
6A Site Works	70	3.1	
External Works	30	1.3	Landscaping, street furniture, boundaries, infrastructure, pavings, hardstandings, site clearance and on-site roadworks.
Decanting	20	0.9	Provisional allowance of circa £200k.
Planning	20	0.9	Provisional allowance for section 106/278 works and landscaping.
6B Drainage	14	0.6	Foul and rainwater discharge to boundaries of site and manhole chambers, soakaways and connections to buildings.
6C External Services	16	0.7	Incoming services and distribution to buildings.
External Works Subtotal	100	4.4	
7 Preliminaries	169	7.5	Management costs, site establishment and site supervision. Contractor's preliminaries, overheads and profit @ circa 12%. Testing and commissioning of building services installations, O&M manuals.
SUBTOTAL (1 to 7)	1,573	69.7	
8 Contingencies	47	2.1	
Contingency	24	1.0	1.5% allowance.
Design Reserve	24	1.0	Allowance for design development @ 1.5%.

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
9 Equipment	74	3.3	Based upon circa £190 / m ² teaching space. ICT loose plug-in equipment is a revenue item (servers, screens etc.) 30% to be retained for the utilising of legacy equipment.
10 Professional Fees	186	8.3	11% of all costs
SUBTOTAL (1 to 10)	1,881	83.3	
11 VAT	376	16.7	20% of all costs Note: Most School and Academy projects managed by the Local Authority will not be liable for VAT
Total allowance for BREEAM Very Good October 2011	2,257	100.0	

Additional BREEAM Excellent Allowance	Cost Allowance £/m ² October 2011	% Total Base Cost (above)	Typical Specification
Base Cost Allowance for BREEAM Excellent	108	4.8	Cost per m ² allowance to achieve BREEAM Excellent from a base scheme of Very Good.
Preliminaries	13	0.6	Contractor's preliminaries, overheads and profit @ circa 12%.
Contingencies	4	0.2	3% allowance.
Professional Fees	14	0.6	11% of all costs
VAT	28	1.2	20% of all costs Note: Most School and Academy projects managed by the Local Authority will not be liable for VAT
Total allowance for BREEAM Excellent October 2011 over and above base scheme of Very Good	166	7.4	

TYPICAL PRIMARY / SECONDARY SCHEME – SUMMARY

MODELS ONE, TWO AND THREE

Base build costs embracing sustainability items relevant to a 'Very Good' BREEAM rating

Element	Cost Allowance £/m ² October 2011	Location factor	Young People's Learning Agency / Skills Funding Agency Regions
MODEL ONE Total allowance October 2011	2,257	1.00	East and West Midlands and the East and South West of England.
MODEL TWO Total allowance October 2011	2,438	1.08	London and the South East of England, together with Essex, Hertfordshire and Cambridgeshire.
MODEL THREE Total allowance October 2011	2,212	0.98	Yorkshire, Humberside and the North East and North West of England

TYPICAL NEW BUILD COST MODEL / SPECIFICATION

MODEL ONE - TYPICAL SMALL WORKS SCHEME (NEW BUILD EXTENSIONS)

**East and West Midlands and the East and South West of England.
(Please see page 44 for detailed information for location)**

TYPICAL SMALL WORKS SCHEME (NEW BUILD EXTENSIONS) – MODEL ONE

Base build costs embracing sustainability items relevant to a 'Very Good' BREEAM rating

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
Demolition	0	0.0	
Substructure	100	5.7	Excavation and disposal, piled foundations, pile caps, ground beams and ground slab. Poor load bearing ground, minimal contamination.
Substructure Subtotal	100	5.7	
2 Superstructure			
2A Frame	0	0.0	
2B Upper Floors	23	1.3	Precast, prestressed reinforced concrete or insitu reinforced concrete or termodeck hollowcore precast planks.
2C Roof	68	3.9	Insitu reinforced concrete with single ply membrane, screed, insulation and associated drainage. Mansafe or equivalent maintenance system.
2D Stairs	28	1.6	Core staircases in precast reinforced concrete with half landings, polyester coated steel balustrades and painted walls, vinyl covered floors and painted ceiling finishes.
2E External Walls	193	11.1	Metal faced rainscreen composite cladding panels to 50% of elevational area with an element of glazed curtain walling. Brise Soleil Brickwork or rendered blockwork to 20% of elevational area.
2F Windows and External Doors	81	4.6	Double glazed windows to 30% of elevational area.
2G Internal Walls and Partitions	37	2.1	Combination of: Glazed screens. Blockwork and solid partitions and twinleaf acoustic wall construction and glazed partitions. Including fire rated areas.
2F Internal Doors	28	1.6	Standard quality solid core doors with laminate or veneer facing in softwood frames. Doors in hardwood frames. Stainless steel ironmongery. Lock suiting and DDA compliant.
Superstructure Subtotal	458	26.2	

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
3 Internal Finishes			
3A Wall Finishes	39	2.2	Combination of: Paint on plastered walls. Paint on fair faced concrete / blockwork. Plasterboard lining and paint, wall tiling, full height to wet areas.
3B Floor Finishes	49	2.8	70 deep screed. Fully accessible raised floor. Edge fixed carpet, hardwood skirtings, limestone tiling. Ceramic tiling. Vinyl flooring, coved skirtings. Epoxy floor paint. Entrance matting and matwells.
3C Ceiling Finishes	25	1.4	Part open ceilings. Plasterboard ceilings on MF framing, emulsion paint finish. Mineral fibre concealed grid ceiling, plasterboard margins and bulkheads. Acoustic treatments.
Internal Finishes Subtotal	113	6.5	
4 Fittings, Furniture and Equipment	75	4.3	External and internal identity, directional and statutory signage. Reception furniture. IT work benches to general teaching spaces. Laboratory work benches. Fume cupboards and other laboratory fittings. Whiteboards, pinboards and other teaching room fittings. Window blinds and vanity units. Retain lockers, shelving and storage racks.
5 Services			
5A Sanitary Installations	6	0.3	WCs and fittings. Extra for disabled fittings. Urinals and fittings. Wash handbasins and fittings. Shower in cubicle, tray, fittings. Classroom sinks, laboratory sinks, cleaners sinks, drinking fountains.
5B Disposal Installation	12	0.7	Waste, soil and vent pipework. Rainwater installations.
5C Mechanical Installation	113	6.5	
Services Equipment	5	0.3	Provisional allowance
Hot and Cold Water Installations	11	0.6	Mains water service treatment. Hot water storage and distribution. Cold water storage and distribution.
Space Heating, Air Treatment and Vent.	97	5.6	Space heating via radiators with all supporting plant and distribution. Underfloor heating to the atrium. Part natural, part mechanical ventilation / cooling, opening windows. Extract to toilets and kitchen areas. Air handling units and limited local cooling.
Gas Installation	0	0.0	
5D Electrical Installation	164	9.4	
Electrical Installation	121	6.9	Mains and sub-mains distribution, small power generally, electrical supplies to mechanical plant and equipment, lighting, emergency lighting and external lighting.
Protective Installation	2	0.1	Lightning protection.
Communication Installation	30	1.7	Fire alarm and smoke detection, interface with doorhold system, disabled refuge comms system. Security system, intruder alarm, CCTV, public address. Induction loop. Disabled WC alarm system and data network including containment.
Specialist Installation	11	0.6	BMS controls.

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
5E Lift & Conveyor Installation	0	0.0	
5F Builders' Work in Connection	12	0.7	Framing and access platforms in risers. Forming holes and chases etc. 4% M&E costs.
Services Subtotal	307	17.6	
BUILDING SUBTOTAL (1 to 5)	1,053	60.3	
6 External Works			
6A Site Works	26	1.5	
External Works	15	0.9	Landscaping, street furniture, boundaries, infrastructure, pavings, hardstandings, site clearance and on-site roadworks.
Decanting	5	0.3	Provisional allowance
Planning	6	0.3	Provisional allowance for section 106/278 works and landscaping.
6B Drainage	14	0.8	Foul and rainwater discharge to boundaries of site and manhole chambers, soakaways and connections to buildings.
6C External Services	7	0.4	Incoming services and distribution to buildings.
External Works Subtotal	47	2.7	
7 Preliminaries	132	7.6	Management costs, site establishment and site supervision. Contractor's preliminaries, overheads and profit @ circa 12%. Testing and commissioning of building services installations, O&M manuals.
SUBTOTAL (1 to 7)	1,232	70.6	
8 Contingencies	37	2.1	
Contingency	18	1.1	1.5% allowance.
Design Reserve	18	1.1	Allowance for design development @ 1.5%.

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
9 Equipment	42	2.4	Based upon circa £190 / m ² teaching space. ICT loose plug-in equipment is a revenue item (servers, screens etc.) 30% to be retained for the utilising of legacy equipment.
10 Professional Fees	144	8.3	11% of all costs
SUBTOTAL (1 to 10)	1,455	83.3	
11 VAT	291	16.7	20% of all costs
Total allowance for BREEAM Very Good October 2011	1,746	100.0	

Note: No Excellent BREEAM Obtainable

TYPICAL SMALL WORKS SCHEME – SUMMARY

MODELS ONE, TWO AND THREE

Base build costs embracing sustainability items relevant to a 'Very Good' BREEAM rating

Element	Cost Allowance £/m ² October 2011	Location factor	Young People's Learning Agency / Skills Funding Agency Regions
MODEL ONE Total allowance October 2011	1,746	1.00	East and West Midlands and the East and South West of England.
MODEL TWO Total allowance October 2011	1,886	1.08	London and the South East of England, together with Essex, Hertfordshire and Cambridgeshire.
MODEL THREE Total allowance October 2011	1,711	0.98	Yorkshire, Humberside and the North East and North West of England

REFURBISHMENT MODEL

RETAINED BUILDINGS

LEVELS OF REFURBISHMENT STANDARDS

FULL: Strip the building back to its primary frame, retain structural floors, provide a new envelope, resurface roof and fully fit out internally including M&E, IT and communication installations.

MEDIUM: Retain the existing structural fabric and envelope of the building and introduce extensive new internal finishes and FF&E with part renewal of M&E, IT and communication installations.

MINIMAL: Retain the building in its present form, with limited elements only of new finishes internally including part FF&E.

Models have been developed for the Medium Refurbishment level and are displayed in an elemental form identical to the New Build models. The models relate to the three Skills Funding Agency and Young People's Learning Agency regions (Southern, Central and Northern). For a detailed schedule of locations please see page 44.

However, such is the variable nature of refurbishment, it is expected that any submission will vary considerably from one to the next. These refurbishment models are intended to act as guidance. Any submissions incorporating total costs greater than $\pm 5\%$ will require more thorough justification.

It is advised that for **Full or Minimal** levels of refurbishment works an adjustment is made to the total base build rates:

Full:	+ 30%	for models One, Two or Three
Minimal:	- 45%	for models One, Two or Three

Any refurbishment submissions will be assessed on the basis of the Medium Refurbishment cost model, with due allowance made for the scope of the works, as given above.

BREEAM: All full refurbishment works are expected to achieve a BREEAM rating of Very Good. Any proposed departure from BREEAM Very Good should be accompanied by a supporting paper demonstrating the inability to achieve BREEAM Very Good.

NOTE: Total Base Build Present Day Costs include fees and full VAT liability and are expressed at October 2011 values.

Refurbishment works can be subject to compliance with current and changing legislation relating to electrical and other installations.

**TYPICAL REFURBISHMENT COST MODEL / SPECIFICATION - MEDIUM LEVEL
REFURBISHMENT**

MODEL ONE

**East and West Midlands and the East and South West of England.
(Please see page 44 for detailed information for location)**

TYPICAL MEDIUM REFURBISHMENT SCHEME – MODEL ONE

Base build costs embracing sustainability items relevant to a 'Very Good' BREEAM rating

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
Demolition	7	0.4	Internal demolitions of existing building only (50% strip out of services, demolition of non-structural internal walls).
Substructure	5	0.3	Works to existing substructure only.
Substructure Subtotal	12	0.8	
2 Superstructure			
2A Frame	32	2.0	Works to existing frame only
2B Upper Floors	24	1.5	Works to existing floors only
2C Roof	33	2.1	Works to existing roof only
2D Stairs	8	0.5	Works to existing stairs only
2E External Walls	43	2.7	Making good / light alteration to ext walls only
2F Windows and External Doors	111	7.0	Double glazed windows to 30% of elevational area.
2G Internal Walls and Partitions	79	5.0	Combination of: Glazed screens facing onto atrium. Blockwork and solid partitions and twinleaf acoustic wall construction and glazed partitions. Including fire rated areas.
2F Internal Doors	41	2.6	Solid core fire rated doors in hardwood frames. Doors in hardwood frames. Stainless steel ironmongery. Lock suiting and DDA compliant.
Superstructure Subtotal	371	23.4	

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
3 Internal Finishes			
3A Wall Finishes	36	2.3	Combination of: Paint on plastered walls. Paint on fair faced concrete / blockwork. Plasterboard lining and paint, wall tiling, full height to wet areas.
3B Floor Finishes	68	4.3	70 deep screed. Fully accessible raised floor. Edge fixed carpet, hardwood skirtings, limestone tiling. Ceramic tiling. Vinyl flooring, coved skirtings. Epoxy floor paint. Entrance matting and matwells.
3C Ceiling Finishes	32	2.0	Plasterboard ceilings on MF framing, emulsion paint finish. Mineral fibre concealed grid ceiling, plasterboard margins and bulkheads. Acoustic treatments.
Internal Finishes Subtotal	136	8.6	
4 Fittings, Furniture and Equipment	57	3.6	External and internal identity, directional and statutory signage. Reception furniture. IT work benches to general teaching spaces. Laboratory work benches. Fume cupboards and other laboratory fittings. Whiteboards, pinboards and other teaching room fittings. Window blinds and vanity units. Retain lockers, shelving and storage racks.
5 Services			
5A Sanitary Installations	10	0.6	WCs and fittings. Extra for disabled fittings. Urinals and fittings. Wash handbasins and fittings. Shower in cubicle, tray, fittings. Classroom sinks, laboratory sinks, cleaners sinks, drinking fountains. IPS panels, pre plumbed.
5B Disposal Installation	9	0.6	Waste, soil and vent pipework. Rainwater installations, syphonic drainage. 20% retained (rainwater installations).
5C Mechanical Installation	140	8.8	
Services Equipment	21	1.3	Kitchen, servery and bar fit out.
Hot and Cold Water Installations	12	0.8	Mains water service treatment. Hot water storage and distribution. Cold water storage and distribution. 40% services retained.
Space Heating, Air Treatment and Vent.	105	6.6	Space heating via radiators with all supporting plant and distribution. Underfloor heating to the atrium. Part natural, part mechanical ventilation / cooling, opening windows, with 26°C maximum teaching area criteria. Extract to toilets and kitchen areas. Air handling units and chillers. 40% services retained.
Gas Installation	2	0.1	Incoming gas supply and distribution
5D Electrical Installation	146	9.2	
Electrical Installation	90	5.7	Mains and sub-mains distribution, small power generally, electrical supplies to mechanical plant and equipment, lighting, emergency lighting and external lighting. 40% services retained.
Protective Installation	2	0.1	Lightning protection.
Communication Installation	30	1.9	Fire alarm and smoke detection, interface with doorhold system, disabled refuge comms system, induction loop alarm interface. Security system, intruder alarm, CCTV, public address. Induction loop. Disabled WC alarm system and data network including containment. 40% services retained.
Specialist Installation	24	1.5	BMS controls.

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
5E Lift & Conveyor Installation	10	0.6	Replacement of 1 Nr 17 person lift to comply with DDA requirements.
5F Builders' Work in Connection	22	1.4	Framing and access platforms in risers. Forming holes and chases etc. 7% M&E costs.
Services Subtotal	337	21.3	
BUILDING SUBTOTAL (1 to 5)	913	57.6	
6 External Works			No allowance for External Works for Medium level refurb.
6A Site Works			
External Works			
Temporary Works			
Decanting			
Planning			
6B Drainage			Foul and rainwater discharge to boundaries of site and manhole chambers, soakaways and connections to buildings.
6C External Services			Incoming services and distribution to buildings.
External Works Subtotal	0	0.0	
7 Preliminaries	110	6.9	Management costs, site establishment and site supervision. Contractor's preliminaries, overheads and profit @ circa 12%. Testing and commissioning of building services installations, O&M manuals.
SUBTOTAL (1 to 7)	1,023	64.5	
8 Contingencies	31	1.9	
Contingency	15	1.0	1.5% allowance.
Design Reserve	15	1.0	Allowance for design development @ 1.5%.

Element	Cost Allowance £/m ² October 2011	%	Typical Specification
9 Equipment	126	8.0	Based upon circa £190 / m ² teaching space. ICT loose plug-in equipment is a revenue item (servers, screens etc.) 15% to be retained for the utilising of legacy equipment.
10 Professional Fees	142	8.9	12% of all costs
SUBTOTAL (1 to 10)	1,321	83.3	
11 VAT	264	16.7	20% of all costs
Total base build present day cost at October 2011	1,585	100.0	

TYPICAL MEDIUM REFURBISHMENT SCHEME – SUMMARY

MODELS ONE, TWO AND THREE

Base build costs embracing sustainability items relevant to a 'Very Good' BREEAM rating

Element	Cost Allowance £/m ² October 2011	Location factor	Young People's Learning Agency / Skills Funding Agency Regions
MODEL ONE Total allowance October 2011	1,585	1.00	East and West Midlands and the East and South West of England.
MODEL TWO Total allowance October 2011	1,712	1.08	London and the South East of England, together with Essex, Hertfordshire and Cambridgeshire.
MODEL THREE Total allowance October 2011	1,553	0.98	Yorkshire, Humberside and the North East and North West of England

VAT

The model assumes a full VAT liability of 20%, on all works including FF&E, although there are instances where the liability will be at a lesser level, dependant upon a number of factors relating to and including design, building linkages, use, the teaching age profile, commercial criteria, together with the nuances of current VAT legislation.

All submissions are to include full VAT liability.

The exception relates to FE colleges which have sole "sixth form" status and are therefore considered by HMRC to be zero rated.

Schools and Academies projects should not be liable for VAT with a few exceptions, such as Voluntary Aided schools.

VAT advice is becoming more commonly engaged by those wishing to procure projects and where it is perceived that a 20% liability may genuinely be reduced via discussion with HMRC and the application of the criteria which determine the level of liability.

INFLATION / DEFLATION

Tender inflation/deflation from October 2011 sits outside the model but is referred to in terms of its impact upon a present day submission at October 2011.

Market movement is progressively being measured, not only through the recognised published indices, but by actively, on a monthly basis, analysing tender returns.

It is assumed that there will be no inflation or deflation against these figures up to March 2012 but this opinion is being reviewed on a quarterly basis and any future corrections will be advised accordingly. Beyond March 2012 inflation should be included at 1.0% p.a. until further notice.

LOCATION IDENTITY

Young People's Learning Agency / Skills Funding Agency Regions		Covering regional offices / areas	Relevant Model
Southern	London North and East	Barking and Dagenham Barnet Camden Enfield Hackney Haringey Havering Islington Kensington + Chelsea Newham Redbridge Tower Hamlets Waltham Forest Westminster	Two
	London South and West	Bexley Brent Bromley Croydon Ealing Greenwich Kingston Hammersmith + Fulham Harrow Hillingdon Hounslow Lambeth Lewisham Merton Richmond Southwark Sutton Wandsworth	Two
	South Central	Hampshire Dorset Surrey Bournemouth Poole Southampton Portsmouth West Sussex Isle of Wight Brighton + Hove	Two One Two One One Two Two Two Two Two

LOCATION IDENTITY

Young People's Learning Agency / Skills Funding Agency Regions		Covering regional offices / areas	Relevant Model
Southern	South West	Bath + NE Somerset Bristol Cornwall Devon Isles of Scilly North Somerset Plymouth Somerset South Glocs Torbay	One
	South East	Kent East Sussex Thurrock Medway Southend on Sea Essex	Two
	Thames Valley	Bucks Oxfordshire Gloucs Swindon Reading West Berks Slough Bracknell Forrest Windsor + Maidenhead Wokingham Wiltshire	Two
Central	Central Eastern	Herts Cams Central Beds Bedford Bedfordshire Luton Northampton Milton Keynes Suffolk Norfolk Peterborough	Two Two Two Two Two Two One Two Two One One

LOCATION IDENTITY

Young People's Learning Agency / Skills Funding Agency Regions		Covering regional offices / areas	Relevant Model
Central	West Midlands	Telford + Wrekin Shropshire Herefordshire Worcs Warwickshire Coventry Birmingham Sandwell + Dudley Walsall Wolverhampton Solihull	One
	East Midlands	Derby Derbyshire Leicester Leicestershire Lincolnshire Nottingham Nottinghamshire Rutland	One
Northern	Cheshire, Warrington + Staffordshire	Bolton Bury Cheshire West and Warrington Trafford Stockport Tameside Manchester Salford Wigan Staffordshire Stoke on Trent Cheshire East Rochdale Oldham	Three

LOCATION IDENTITY

Young People's Learning Agency / Skills Funding Agency Regions	Covering regional offices / areas	Relevant Model
Northern	Liverpool City Region, Cumbria and Lancashire	Three
	Yorkshire and the Humber	Three
	North East	Three

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