Skills Funding Agency

FURTHER EDUCATION SCHEMES

COST MODELS

NEW BUILD & REFURBISHMENT CONSTRUCTION

October 2013

CONTENTS

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's regions of Southern, Central and Northern.

Specific reference is made to:

- Gross Internal Areas
- Storey Heights
- General Specifications
- Location
- Procurement Routes
- Sustainability
- Breeam
- Programme

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 pages 40-43 for regional identification

The comparison of a Scheme proposal with the appropriate model should be undertaken through 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
- Small Works Projects (New build extensions)

ACKNOWLEDGEMENTS

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

The current issue is dated October 2013.

CHANGES FROM OCTOBER 2011 ISSUE

- Each model has been updated to reflect present day costs at June 2013 (previously October 2011).

- The typical programme dates have been amended to reflect a June 2013 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 (June 2013).

- Please note the references to VAT legislation which are noted on page 38.

EXECUTIVE SUMMARY

The purpose of the study is 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 construction industry has experienced a long period of contraction during which tender prices have steadily dropped. It is considered that the bottom of the market was reached earlier this year and it should be expected that compliant and worthy contractor submissions will not fall to any lower levels.

Against this background the cost of basic raw materials such as steel have been rising steadily and the period during which these costs were being absorbed by contractors has now passed and therefore tenders can be expected to increase in line with the increase in the cost of basic materials and the operating costs of companies which are materially effected by the price of energy (oil, gas, electricity) together with a band of other imposed statutory costs.

Costs presented herein are at June 2013 levels which indicates an outturn cost of a scheme which is theoretically completed in one day in June 2013.

Programmes of work which complete on site beyond June 2013 are likely to incur some level of increased costs to accommodate the increases in price of a range of typical items referred to above.

These costs are further evaluated in the section titled 'Increased Costs'.

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 and Small Works Projects (New build extensions).

SUSTAINABILITY / RENEWABLES

Costs for Sustainability and Renewables are included within the Model.

The Skills Funding Agency are placing greater emphasis upon funding applications being supported by comprehensive statements of sustainability strategy and future intent setting out measurable targets which indicate significant reduction in the current carbon footprint, providing a comparison between the pre project data and that which will be achieved as a result of the project.

It is proposed that further discussions with the SFA will create a more specific set of requirements to be satisfied in this respect which will enable applicants to specifically focus on Government policy and sustainability as one of the conditions of funding.

BREEAM

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 31 "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 generally 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 New Build scheme

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 open performing and community spaces)
Number of Storeys :	3-4 (Ground, First, Second/Third)
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, June 2013
General Specification:	Offering full range curriculum, 3-4 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.

ASSUMED PROGRAMME DATES:

Feasibility:	Start:	July 2012
	Complete:	August 2012
Proposal - Stage C/D :	Start:	September 2012
	Submit:	December 2012
Full Proposal Stage E/F:	Start:	January 2013
	Submit:	April 2013
Start on Site:		June 2013
Phasing:		Two consecutive phases if applicable
Completion on Site:		August 2014
Pre Contract Period:		11 months
Post Contract Period:		14 months

NOTE: The model costs are stated at June 2013.

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

CONTRACTOR PROCUREMENT STRATEGY

The model addresses either a single stage or two stage design and build procurement strategy for new build as the route for producing a firm price from a preferred contractor competitively selected following a rigorous tender evaluation process and interviews.

This represents the basis of costing for new build.

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 additional 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 abnormals 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 as additional costs outside the model but only if supported by a case study for each item and demonstrating such items as being unavoidable and included as representing the most economical approach to accommodate such works, not exceeding 2% of total cost.

Such works may include:

- Off site infrastructure to access the project
- Remote locations
- Archaeological impact
- Incoming mains services from a distance off site

CAUTIONARY NOTE

The models are a guide only.

During the process of using the data for whatever purpose it is essential that any proposed project under consideration is understood in respect of its similarity or relevance to the models and the variants are reflected in any evaluation where the models are being used as a benchmark.

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 pages 40/43 for detailed information for location)

TYPICAL FE COLLEGES SCHEME – MODEL ONE

Base build costs embracing sustainability items relevant to an 'Excellent' BREEAM rating

Element	Cost Allowance £/m² June 2013	%	Typical Specification
Demolition	9	0.4	3,000 m² of two storey buildings, with minor deleterious material content.
Substructure	118	4.8	Excavation and disposal, piled foundations, pile caps, ground beams and ground slab. Poor load bearing ground, minimal contamination.
Substructure Subtotal	**127**	**5.2**	
2 Superstructure			
2A Frame	112	4.6	Structural steel beams and columns, fire protected and encased or reinforced concrete beams and columns.
2B Upper Floors	81	3.3	Precast, prestressed reinforced concrete or insitu reinforced concrete or termodeck hollowcore precast planks.
2C Roof	106	4.3	Insitu reinforced concrete with single ply membrane, screed, insulation and associated drainage. Mansafe or equivalent maintenance system.
2D Stairs	27	1.1	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	115	4.7	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	107	4.4	Double glazed windows to 30% of elevational area.
2G Internal Walls and Partitions	77	3.2	Combination of: Glazed screens. Blockwork and solid partitions and twinleaf acoustic wall construction and glazed partitions. Including fire rated areas.
2F Internal Doors	28	1.1	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	**653**	**26.8**	

Element	Cost Allowance £/m² June 2013	%	Typical Specification
3 Internal Finishes			
3A Wall Finishes	29	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	71	2.9	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	28	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	**128**	**5.2**	
4 Fittings, Furniture and Equipment	**32**	**1.3**	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	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	171	7.0	
Services Equipment	23	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.	132	5.4	Space heating via radiators with all supporting plant and distribution. 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	213	8.7	
Electrical Installation	129	5.3	Mains and sub-mains distribution, small power generally, electrical supplies to mechanical plant and equipment, lighting, emergency lighting and external lighting.
Protective Installation	3	0.1	Lightning protection.
Communication Installation	58	2.4	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	23	0.9	BMS controls.

Element	Cost Allowance £/m² October 2011	%	Typical Specification
5E Lift & Conveyor Installation	21	0.9	2 Nr 10 person lifts to comply with DDA requirements.
5F Builders' Work in Connection	17	0.7	Framing and access platforms in risers. Forming holes and chases etc. 4% M&E costs.
Services Subtotal	**447**	**18.3**	
BUILDING SUBTOTAL (1 to 5)	**1,387**	**56.9**	
6 External Works			
6A Site Works	74	3.0	
External Works	32	1.3	Landscaping, street furniture, boundaries, infrastructure, pavings, hardstandings, site clearance and on-site roadworks.
Decanting	20	0.8	Provisional allowance of circa £50k.
Planning	22	0.9	Provisional allowance for section 106/278 works and landscaping.
6B Drainage	13	0.5	Foul and rainwater discharge to boundaries of site and manhole chambers, soakaways and connections to buildings.
6C External Services	14	0.6	Incoming services and distribution to buildings.
External Works Subtotal	**101**	**4.1**	
7 Preliminaries	**193**	**7.9**	Management costs, site establishment and site supervision. Contractor's preliminaries, overheads and profit @ circa 13%. Testing and commissioning of building services installations, O&M manuals. Subcontractor preliminaries.
SUBTOTAL (1 to 7)	**1,681**	**68.9**	
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 £/m² June 2013	%	Typical Specification
9 Equipment	**77**	**3.2**	Based upon circa £190 / m² 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	**225**	**9.2**	13% of all costs excluding FFE
SUBTOTAL (1 to 10)	**2,033**	**83.4**	
11 VAT	**406**	**16.6**	20% of all costs
Total allowance including BREEAM Very Good June 2013	**2,439**	**100.0**	

From Very Good to Excellent, Add:

Additional BREEAM Excellent Allowance	Cost Allowance £/m² June 2013	% Total Base Cost (above)	Typical Specification
Base Cost Allowance for BREEAM Excellent	116	4.8	Cost per m² allowance to achieve BREEAM Excellent from a base scheme of Very Good.
Preliminaries	15	0.6	Contractor's preliminaries, overheads and profit @ circa 13%.
Contingencies	4	0.2	3% allowance.
Professional Fees	17	0.7	% of all costs
VAT	30	1.2	20% of all costs
Total allowance for BREEAM Excellent June 2013 over and above base scheme of Very Good	**182**	7.5	

TYPICAL FE COLLEGES SCHEME – SUMMARY

MODELS ONE, TWO AND THREE

Base build costs embracing sustainability items relevant to 'Excellent' BREEAM rating

Element	Cost Allowance £/m² June 2013	Location factor	Skills Funding Agency
MODEL ONE **Total allowance June 2013**	**2,621**	**1.00**	East and West Midlands and the East and South West of England.
MODEL TWO **Total allowance June 2013**	**2,804**	**1.07**	London and the South East of England, together with Essex, Hertfordshire and Cambridgeshire.
MODEL THREE **Total allowance June 2013**	**2,516**	**0.96**	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 pages 40/43 for detailed information for location)

ADOPTED CRITERIA

Brief description of the concept of a typical Extension

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 : 500 - 700 sq m (measured inside face to inside face of external walls across all service voids and staircases and including

Number of Storeys : 2 (Ground, First)

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, June 2013

General Specification: As appropriate in respect of existing building

Value: £1.00m to £1.30m gross

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 £/m² June 2013	%	Typical Specification
Demolition	0	0.0	None
Substructure	95	4.9	Excavation and disposal, concrete pad foundations.
Substructure Subtotal	**95**	**4.9**	
2 Superstructure			
2A Frame	81	4.2	Lightweight concrete or steel frame
2B Upper Floors	60	3.1	Precast, prestressed reinforced concrete or insitu reinforced concrete or termodeck hollowcore precast planks.
2C Roof	76	3.9	Insitu reinforced concrete with single ply membrane, screed, insulation and associated drainage. Mansafe or equivalent maintenance system.
2D Stairs	24	1.2	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	107	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	87	4.5	Double glazed windows to 30% of elevational area.
2G Internal Walls and Partitions	48	2.5	Combination of: Glazed screens. Blockwork and solid partitions and twinleaf acoustic wall construction and glazed partitions. Including fire rated areas.
2F Internal Doors	26	1.3	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	**489**	**25.4**	

Element	Cost Allowance £/m² June 2013	%	Typical Specification
3 Internal Finishes			
3A Wall Finishes	33	1.7	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	55	2.9	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	27	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	**115**	**6.0**	
4 Fittings, Furniture and Equipment	**38**	**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	0.5	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	15	0.8	Waste, soil and vent pipework. Rainwater installations.
5C Mechanical Installation	122	6.3	
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	5.0	Space heating via radiators with all supporting plant and distribution. 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	176	9.1	
Electrical Installation	121	6.3	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	1.6	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 £/m² June 2013	%	Typical Specification
5E Lift & Conveyor Installation	0	0.0	None
5F Builders' Work in Connection	15	0.8	Framing and access platforms in risers. Forming holes and chases etc. 4% M&E costs.
Services Subtotal	**337**	**17.5**	
BUILDING SUBTOTAL (1 to 5)	**1,074**	**55.8**	
6 External Works			
6A Site Works	33	1.7	
External Works	17	0.9	Landscaping, street furniture, boundaries, infrastructure, pavings, hardstandings, site clearance and on-site roadworks.
Decanting	9	0.5	Provisional allowance
Planning	7	0.4	Provisional allowance for section 106/278 works and landscaping.
6B Drainage	14	0.7	Foul and rainwater discharge to boundaries of site and manhole chambers, soakaways and connections to buildings.
6C External Services	8	0.4	Incoming services and distribution to buildings.
External Works Subtotal	**55**	**2.9**	
7 Preliminaries	**158**	**8.2**	Management costs, site establishment and site supervision. Contractor's preliminaries, overheads and profit @ circa 14%. Testing and commissioning of building services installations, O&M manuals. Subcontractors preliminaries.
SUBTOTAL (1 to 7)	**1,287**	**66.8**	
8 Contingencies	**64**	**3.3**	
Contingency	32	1.7	3% allowance.
Design Reserve	32	1.7	Allowance for design development @ 3%.

Element	Cost Allowance £/m² June 2013	%	Typical Specification
9 Equipment	**57**	**3.0**	Based upon circa £190 / m² 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	**197**	**10.2**	14% of all costs
SUBTOTAL (1 to 10)	**1,605**	**83.3**	
11 VAT	**321**	**16.7**	20% of all costs
Total allowance for BREEAM Very Good June 2013	**1,926**	**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 £/m² June 2013	Location factor	Skills Funding Agency Regions
MODEL ONE **Total allowance June 2013**	**1,926**	**1.00**	East and West Midlands and the East and South West of England.
MODEL TWO **Total allowance June 2013**	**2,157**	**1.12**	London and the South East of England, together with Essex, Hertfordshire and Cambridgeshire.
MODEL THREE **Total allowance June 2013**	**1,868**	**0.97**	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 regions (Southern, Central and Northern). For a detailed schedule of locations, please see page 40-43.

However, such is the variable nature of refurbishment, it is expected that any submission will range considerably from one to the next. These refurbishment models are intended to act as guidance.

It is advised that for **Full or Minimal** levels of refurbishment works an adjustment is made to the total base (medium) 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 June 2013 values.

Refurbishment works can be subject to compliance with current and changing legislation (building regulations) 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 pages 40/43 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 £/m² June 2013	%	Typical Specification
Demolition	8	0.5	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	**13**	**0.8**	
2 Superstructure			
2A Frame	30	1.9	Works to existing frame only - adaptation/fire rating
2B Upper Floors	27	1.7	Works to existing floors only - openings, trimming
2C Roof	38	2.4	Works to existing roof only - resurfacing
2D Stairs	10	0.6	Works to existing stairs only
2E External Walls	41	2.6	Making good / light alteration to ext walls only
2F Windows and External Doors	111	6.9	Double glazed windows to 30% of elevational area.
2G Internal Walls and Partitions	74	4.6	Combination of: Glazed screens. Blockwork and solid partitions and twinleaf acoustic wall construction and glazed partitions. Including fire rated areas.
2F Internal Doors	37	2.3	Solid core fire rated doors in hardwood frames. Doors in hardwood frames. Stainless steel ironmongery. Lock suiting and DDA compliant.
Superstructure Subtotal	**368**	**22.9**	

Element	Cost Allowance £/m² June 2013	%	Typical Specification
3 Internal Finishes			
3A Wall Finishes	36	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	68	4.2	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**	**8.5**	
4 Fittings, Furniture and Equipment	**37**	**2.3**	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	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	144	9.0	
Services Equipment	23	1.4	Kitchen, servery and bar fit out.
Hot and Cold Water Installations	12	0.7	Mains water service treatment. Hot water storage and distribution. Cold water storage and distribution. 40% services retained.
Space Heating, Air Treatment and Vent.	106	6.6	Space heating via radiators with all supporting plant and distribution. Part natural, part mechanical ventilation / cooling, opening windows, with 26ºC maximum teaching area criteria. Extract to toilets and kitchen areas. Air handling units and chillers. 40% services retained.
Gas Installation	3	0.2	Incoming gas supply and distribution
5D Electrical Installation	146	9.1	
Electrical Installation	90	5.6	Upgrade of 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	Upgrade of 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 £/m² June 2013	%	Typical Specification
5E Lift & Conveyor Installation	14	0.9	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	**345**	**21.5**	
BUILDING SUBTOTAL (1 to 5)	**899**	**55.9**	
6 External Works			No allowance for External Works for Medium level refurb.
6A Site Works	33		Planting, landscapes
External Works	12		
Temporary Works	7		
Decanting	8		Allow £15,000
Planning	6		May not be required
6B Drainage	Nil		Foul and rainwater discharge to boundaries of site and manhole chambers, soakaways and connections to buildings.
6C External Services	Nil		Incoming services and distribution to buildings.
External Works Subtotal	**33**	**2.1**	
7 Preliminaries	**121**	**7.5**	Management costs, site establishment and site supervision. Contractor's preliminaries, overheads and profit @ circa 13%. Testing and commissioning of building services installations, O&M manuals. Subcontractors preliminaries.
SUBTOTAL (1 to 7)	**1,053**	**65.5**	
8 Contingencies	**52**	**3.2**	
Contingency	26	1.6	3% allowance.
Design Reserve	26	1.6	Allowance for design development @ 3%.

Element	Cost Allowance £/m² June 2013	%	Typical Specification
9 Equipment	**80**	**5.0**	Based upon circa £190 / m² 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	**154**	**9.6**	13% of all costs
SUBTOTAL (1 to 10)	**1,339**	**83.3**	
11 VAT	**268**	**16.7**	20% of all costs
Total base build present day cost at June 2013	**1,607**	**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 £/m² June 2013	Location factor	Skills Funding Agency Regions
MODEL ONE **Total allowance June 2013**	**1,607**	**1.00**	East and West Midlands and the East and South West of England.
MODEL TWO **Total allowance June 2013**	**1,751**	**1.09**	London and the South East of England, together with Essex, Hertfordshire and Cambridgeshire.
MODEL THREE **Total allowance June 2013**	**1,542**	**0.96**	Yorkshire, Humberside and the North East and North West of England

VAT

All submissions are to include full VAT liability.

INCREASED COSTS

Tender inflation from June 2013 sits outside the model but is referred to in terms of its impact upon projects completing after June 2013.

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

It is expected that tenders will increase by an average of 1.85% during the period June 2013 to June 2014 and a further 1.25% during the period June 2014 to June 2015.

LOCATION IDENTITY

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 Wright Brighton + Hove	Two One Two One One Two Two Two Two Two

LOCATION IDENTITY

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

LOCATION IDENTITY

Skills Funding Agency Regions		Covering regional offices / areas	Relevant Model
Central	West Midlands	Telford + Wrekin Shropshire Herefordshire Worcs Warwickshire Coventry Birmingham Sandwell + Dudley Staffordshire 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 Stoke on Trent Cheshire East Rochdale Oldham	Three

LOCATION IDENTITY

Skills Funding Agency Regions		Covering regional offices / areas	Relevant Model
Northern	Liverpool City Region, Cumbria and Lancashire	Liverpool Cumbria Lancashire Blackpool Sefton Blackburn + Darwin Wirral Knowsley Halton St Helens	Three
	Yorkshire and the Humber	North Yorks York East Riding of Yorks Doncaster Kingston upon Hull Rotherham Sheffield Barnsley Kirklees Wakefield Leeds Bradford Calderdale North Lincs North East Lincs	Three
	North East	Northumberland County Durham Gateshead Newcastle upon Tyne North Tyneside South Tyneside Sunderland Hartlepool Middlesborough Redcar + Cleveland Stockton on tees Darlington	Three