Capital Works Management Framework

How to use the
Costing Document (Building Works) Template

CO 1

How to use the Costing Document (Building Works) Template
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Contents

Using the Costing Document (Building Works)

Overview

The Costing Document (Building Works) (CO 1) is an Excel workbook. The workbook contains a number of worksheets:

- Cover Page
- Executive Summary
- Cost Summary
- Cost Breakdown
- Nine worksheets for recording detailed information on individual cost elements.

Using the Template

The workbook can be used throughout project planning, execution and analysis, although not all of it is relevant at every stage.

In each case, when you have compiled the Costing Document you should:

1. Print out the entire workbook and keep it on file; and
2. Save the workbook with a suitable name and in a suitable location using **Save As**.

Outline Cost Plan

When developing an **Outline Cost Plan**, you will most likely want to collect and record information only at the level of the broad categories of building elements. You enter this information on the category summary lines in the Cost Breakdown worksheet.

Detailed Cost Plan

When developing a **Detailed Cost Plan**, you will want to break down those figures further. You enter this information in the Cost Breakdown worksheet, this time using the detail lines for each category. The subtotals and totals are calculated automatically and carried forward to the Cost Summary and Executive Summary worksheets.

Tender Cost Analysis

When carrying out a **Tender Cost Analysis**, you can similarly use the Cost Breakdown worksheet, and, if you wish, you can also use the individual Element category worksheets to present a more detailed breakdown, with descriptions and notes of the cost elements.

Analysis of Outturn Costs

When the project is complete, and you are carrying out an **Analysis of Outturn Costs**, you can use the Cost Breakdown worksheet, with the individual Element category worksheets if it is useful to do so.

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Using the Costing Document (Building Works), Continued

How to Open the Workbook

Click on CO 1_1 to open excel spreadsheet.

How to Fill in the Workbook

Two of the worksheets contain cells that must be completed:

- Executive Summary; and
- Cost Breakdown.

As you fill in the cost cells, all related cells are calculated and completed automatically.

All of the worksheet cells, except those to be completed, are password protected. The cells to be completed in the Executive Summary and Cost Breakdown are shaded in blue. Pressing the tab key will select each editable (blue) cell in turn. In some cases, selecting or editing a cell may cause help information relating to that cell to be displayed.

The additional worksheets for each of the Element categories and for Direct and Indirect Costs may be used to keep a record of costs incurred in each category. However, any figures entered here will not be used in any calculations in the Executive Summary, Cost Summary or Cost Breakdown. The cost information entered here is totalled and checked against the figures entered in the Cost Breakdown. For more information about the Elements, see the next section, *National Standard and Building Site Elements*. For detailed definitions of the Elements, and Direct and Indirect Costs, see *Appendix 1*.

Saving and Printing

When you have edited the spreadsheet, you should save it to a suitable location on your hard disk or server.

Print out the workbook in the normal way – you can print an individual worksheet or the entire workbook

Further Information

For further information about cost planning and analysis, see *GN 2.2 Planning and Control of Capital Costs.*

National Standard Building and Site Elements

Standard Elements

In the traditional form of tendering, a detailed breakdown of the total building costs is contained in the priced Bill of Quantities. However, because of the degree of detail, the individual items in the Bill cannot readily be used as the basis for cost control during design or for comparative cost guidance on alternative solutions. Furthermore, Bill items are not compatible with the way designs evolve – in designing, the Architect is not thinking in terms of cubic metres of concrete or square metres of brickwork, but in terms of how to shape and enclose the building, the number of floors, the partition layout and the type of lighting, type of finishes etc. that are necessary. Consequently, the **design element** has been adopted as the cost centre for cost control.

An element may be defined as 'that part of a building that always fulfils the same function, irrespective of design or specification'.

Standard elements are common to Architect, Engineer and Quantity Surveyor, and therefore facilitate coordinated working between all Design Team members. The concept of standard elements is the cornerstone of the whole cost control system.

The National Standard Building Elements are based on those agreed for international use by the International Council for Research and Innovation in Building and Construction (CIB). They have been chosen because:

i. they fulfil the requirements for a capital cost control system;

ii. they facilitate the addition of estimated (and, eventually, historic) maintenance and running costs to capital costs, to obtain total cost-in-use; and

iii. they form an important part of an integrated classification and information system for the whole building process.

Where the Elements are used for structuring project information (including information in Bills of Quantities), their content will be as shown in this document.

Where used for design cost control purposes, it may be necessary for the Quantity Surveyor to make certain adjustments to the content; notes to this effect are highlighted with the description of the Elements. The Bill of Quantities should be structured in Standard Elements or in a way that will facilitate the analysis of the subsequent tender into them.

Data banks of elemental costs are built up by analysing tenders on a systematic basis. The Element cost is then expressed as a **unit cost per sq m of floor area** and as a unit cost per unit quantity of the Element.

For more detailed information about cost planning and analysis, see *GN2.2 Planning and Control of Capital Costs*.

Continued on next page

National Standard Building and Site Elements, Continued

Element Definitions

The Building and Site Element definitions are based on the National Building Elements Committee's *National Standard Building Elements and Design Cost Control Procedures (Third Edition 1993)*.

The Elements are shown in Table 1 overleaf, and are defined in detail in *Appendix 1*.

Deriving 'Total Cost of Project'

The second table overleaf shows how these Elements are combined with other components to derive **Total Cost of Project** for cost planning, checking and analysis purposes.

Guidelines on Using the Elements Tables

Please note the following guidelines on using the Elements Tables:

a. It is recommended that in practice the Tables be used in numerical sequence, starting at the beginning with '(1-) Substructure Generally' and, where a choice exists for the inclusion of any item, that it should be inserted in the earliest appropriate Table.
For example, where a pre-fabricated, pre-finished stair unit comprises treads, risers, balustrades and handrails, it should be included totally in '(24) Stairs, Ramps' rather than partially in '(34) Stairs, Ramps: Completions' and '(44) Stairs, Ramps: Finishes'.

b. The concept of 'finish' in '(4-) Finishes Generally' is usually that of an applied finish to an item already in position.
For example, in '(41) Wall Finishes Externally', a brick skin may be included in this Element only when it is an applied finish to a wall already erected.

c. Where a duct, lift shaft or similar service facility is an integral part of the building structure, it should, for production information purposes, be included with the appropriate structural Element. For design cost control purposes, it should be included with the relevant services Element.

d. The (8-) Element Group may be used in those unusual circumstances when loose furniture is included in the building contract. This Element Group should not be used for any other purposes.

e. Glazing and ironmongery should be included in the Elements containing the items to which they are fixed.

f. 'Reserved' means that the Element may not be used.

Table 1: Matrix of Building and Site Elements and Indirect Costs

BUILDING (Direct Costs)							SITE (Direct Costs)
Substructure	**Structure**	**Structure Completions**	**Finishes**	**Services (Mainly Piped and Ducted)**	**Services (Mainly Electrical)**	**Fittings and Furniture**	
(1-) Substructure Generally	(2-) Structure Generally	(3-) Structure Completions Generally	(4-) Finishes Generally	(5-) Services (Mainly Piped and Ducted) Generally	(6-) Services (Mainly Electrical) Generally	(7-) Fittings and Furniture Generally	(-0) Site Generally
(11) Ground, Earth Shapes	(21) External Walls	(31) External Walls: Completions within Openings	(41) Wall Finishes Generally	(51) Heating Centre	(61) Electrical Supply and Main Distribution	(71) Display, Circulation Fittings	(10) Prepared Site
(12) Reserved	(22) Internal Walls, Partitions	(32) Internal Walls, Partitions: Completions within Openings	(42) Wall Finishes Internally	(52) Drainage and Refuse Disposal	(62) Power	(72) Work, Rest, Play Fittings	(20) Site Structures
(13) Floors in Substructure	(23) Floors, Galleries	(33) Floors, Galleries: Completions	(43) Floor Finishes	(53) Water Distribution	(63) Lighting	(73) Culinary Fittings	(30) Site Enclosures
(14) Reserved	(24) Stairs, Ramps	(34) Stairs, Ramps: Completions	(44) Stairs, Ramps: Finishes	(54) Gases Distribution	(64) Communications	(74) Sanitary, Hygiene Fittings	(40) Roads, Paths, Pavings
(15) Reserved	(25) Reserved	(35) Suspended Ceilings	(45) Ceiling Finishes	(55) Space Cooling	(65) Security and Protection	(75) Cleaning, Maintenance Fittings	(50) Site Services (Mainly Piped and Ducted)
(16) Foundations and Rising Walls	(26) Reserved	(36) Reserved	(46) Reserved	(56) Space Heating	(66) Transport	(76) Storage, Screening Fittings	(60) Site Services (Mainly Electrical)
(17) Piled Foundations	(27) Roofs	(37) Roof: Completions	(47) Roof Finishes	(57) Ventilation and Air Conditioning	(67) Reserved	(77) Reserved	(70) Site Fittings
(18) Reserved	(28) Frames	(38) Reserved	(48) Reserved	(58) Other Services (Mainly Piped and Ducted)	(68) Other Services (Mainly Electrical)	(78) Reserved	(80) Landscape, Play Areas
(19) Summary: Building Substructure	(29) Summary: Building Structure	(39) Summary: Building Structure Completions	(49) Summary: Building Finishes	(59) Summary: Building Services (Mainly Piped and Ducted)	(69) Summary: Building Services (Mainly Electrical)	(79) Summary: Building Fittings and Furniture	(9) Summary: Site

Note: 'Reserved' codes should not be used.

Table 2: Components of 'Total Cost of Project'

Building (Direct Costs)							Site (Direct Costs)	Connective Alterations, Repairs (Direct Costs)	Special Works (Direct Costs)	Indirect Costs
(1-)	(2-)	(3-)	(4-)	(5-)	(6-)	(7-)	(-0)			
(11)						(71)	(10)			
◄- - - - Element Groups (1-) to (7-) inclusive - - - -►							Element Group (-0)			
(18)						(78)	(80)			
(19)	(29)	(39)	(49)	(59)	(69)	(79)	(90)			
			(99)				(90)			(0-)

(9-)

Building and Site Elements

Connective Alterations, Repairs

Spe

Project (Direct Costs)

Project (Indirect Costs)

Cost of Project excluding VAT

VAT

TOTAL COST OF PROJECT

Appendix 1: Building Elements Inclusions and Exclusions

The tables below list the Sub-elements in each of the Building Elements, and define inclusions and exclusions for each Sub-Element.

Substructure

Work below the underside of the lowest screed, or where no screed exists, below the top of the lowest floor.
Excluded is all work related to (10) PREPARED SITE.

	Substructure	Include	Exclude	Other
1-	**SUBSTRUCTURE GENERALLY**			All general information applicable to building substructure as a whole and information applicable to two or more Elements from (11) GROUND, EARTH SHAPES to (18) Reserved.
10	**See Site Elements**			
11	**GROUND, EARTH SHAPES**	Excavated ground Filled ground Stabilised ground Permanent ground supports, including retaining walls and sheet piles Ground anchors Shaped earth, shaped fill	All items included in (10) PREPARED SITE Piled foundations – see (17) PILED FOUNDATIONS	

	Substructure	Include	Exclude	Other
13	**FLOORS IN SUBSTRUCTURE**	All floor work to top of lowest structural floor, whether of composite or monolithic construction, e.g. Hardcore Concrete beds/slabs Reinforcement Dwarf walls and wallplates Integral finishes Timber or metal joists Floor decking Insulation Integral ducts Integral traps and openings Damp proofing Timber boarding	Continuous access and cavity floors – see (33) FLOORS, GALLERIES: COMPLETIONS Mat frames and recessed covers set in screed – see (43) FLOOR FINISHES The following is not integral with floors in substructure: Traps and openings – see (33) FLOORS, GALLERIES: COMPLETIONS Screeds and finishes – see (43) FLOOR FINISHES Ducts – see the relevant Services Element depending on the function of the duct	For design cost control purposes, the cost of Ducts should be added to the cost of the relevant Services Element, depending on the function of duct.
16	**FOUNDATIONS, RISING WALLS**	Foundation work to top of floors in substructure, including strip, pad, raft Column bases Rising walls, columns Damp proof courses and tanking Insulation	Piled Foundations – see (17) PILED FOUNDATIONS	
17	**PILED FOUNDATIONS**	All parts of piled foundation for building, e.g. Piles, however formed Pile caps Associated ground beams	Permanent ground supports, including retaining walls and sheet piles – see (11) GROUND, EARTH SHAPES Ground anchors – see (11) GROUND, EARTH SHAPES	

Structure

The primary structural carcass above the substructure, including all secondary items and finishes which are integral with the structure.

	Structure	Include	Exclude	Other
2-	**STRUCTURE GENERALLY**			All general information applicable to the building structure as a whole and information applicable to two or more Elements from (21) EXTERNAL WALLS to (28) FRAMES.
20	**See Site Elements**			
21	**EXTERNAL WALLS**	Walls, however formed Cladding and curtain walling Continuous screens and continuous shop-fronts having the nature of walls Bracing, rails, studding Insulation within walls Copings, sills, lintels Damp-proof courses and tanking Integral chimneys and ducts Integral doors and windows Integral finishes	Chimneys which are integral with building frame – see (28) FRAMES Insulation integral with applied finishes – see (41) WALL FINISHES EXTERNALLY or (42) WALL FINISHES INTERNALLY The following if not integral with wall structure: Doors and windows – see (31) EXTERNAL WALLS: COMPLETIONS WITHIN OPENINGS Chimneys – see (51) HEATING CENTRE Ducts – see the relevant Services Element, depending on the function of the duct	For design cost control purposes *The cost of* — *Should be added to the cost of* Walls to roof spaces, parapets and copings — (27) ROOFS Sills, lintels and relevant damp-proof courses — (31) EXTERNAL WALLS: COMPLETIONS WITHIN OPENINGS Chimneys — (51) HEATING CENTRE Ducts — The relevant Services Element, depending on the function of the duct

	Structure	Include	Exclude	Other
22	**INTERNAL WALLS, PARTITIONS**	Internal walls and partitions, however formed Demountable partitions and space dividers Continuous screens and continuous shop-fronts having the nature of walls or partitions Insulation within walls Damp-proof courses Integral chimneys and ducts Integral doors, windows and screens Integral sills and lintels Integral finishes	Sliding/folding doors and partitions – see (32) INTERNAL WALLS, PARTITIONS: COMPLETIONS WITHIN OPENINGS Free standing screens, space dividers which have the character of fittings – see (76) STORAGE, SCREENING FITTINGS The following if not integral with wall/partition structure: Doors, windows and screens – see (32) INTERNAL WALLS, PARTITIONS: COMPLETIONS WITHIN OPENINGS Finishes – see (42) WALL FINISHES INTERNALLY Insulation integral with applied finishes – see (42) WALL FINISHES INTERNALLY Chimneys – see (51) HEATING CENTRE Ducts – see the relevant Services Element, depending on the function of the duct	For design cost control purposes *The cost of* — *Should be added to the cost of* Walls in roof space — (27) ROOFS Sills and lintels — (32) INTERNAL WALLS, PARTITIONS: COMPLETIONS WITHIN OPENINGS Chimneys — (51) HEATING CENTRE Ducts — The relevant Services Element, depending on the function of the duct
23	**FLOORS GALLERIES**	Suspended floor structures above substructure, however formed If not part of frame, beams and columns supporting floors, balconies and galleries Joists, wall plates Integral ducts If floor construction does not of itself provide a platform, floor boarding and decking Traps, openings, finishes, integral with floor/balcony and gallery structure Insulation within floors and galleries	Floors in substructure – see (13) FLOORS IN SUBSTRUCTURE Traps and openings, if not integral with structure – see (33) FLOORS, GALLERIES: COMPLETIONS Stages and rostrums, continuous access and cavity floors – see (33) FLOORS, GALLERIES: COMPLETIONS Insulation integral with floor finishes – see (43) FLOOR FINISHES The following if not integral with floors, galleries structure: Screeds and finishes – see (43) FLOOR FINISHES Ducts – see the relevant Services Element, depending on the function of the duct	For design cost control purposes, the cost of Ducts should be added to the cost of the relevant Services Element, depending on the function of duct.

	Structure	Include	Exclude	Other
24	**STAIRS, RAMPS**	Stairs and ramps, however formed Integral balustrades Integral finishes Insulation Supports and bracings for stairs and ramps Ramp walls Fixed ladders	The following if not integral stairs/ramps structure: Balustrades – see (34) STAIRS, RAMPS: COMPLETIONS Finishes – see (44) STAIRS, RAMPS: FINISHES	
27	**ROOFS**	Roof structure, however formed The following if integral with roof structure: Boarding, insulation, rainwater disposal systems, rooflights, openings and finishes	Suspended ceilings – see (35) SUSPENDED CEILINGS and (45) CEILING FINISHES Sheeting, slating, tiling and associated battens and sarking – see (47) ROOF FINISHES The following if not integral with roof structure: Rooflights and openings – see (37) ROOF COMPLETIONS Insulation – see (47) ROOF FINISHES Rainwater disposal systems – see (52) DRAINAGE AND REFUSE DISPOSAL Finishes – see (47) ROOF FINISHES	For design cost control purposes, the cost of Walls to roof spaces, parapets, and copings should be added to the cost of (27) ROOFS.
28	**FRAMES**	Structural frames, however formed Beams, columns, bracings, ties, encasings which are part of structural frame Finishes integral with structural frame Chimneys and lift shafts which are part of structural frame		

Structure Completions

Non-integral secondary items or work to the structure, including the completions of openings in the structure.

	Structure Completions	Include	Exclude	Other
3-	**STRUCTURE COMPLETIONS GENERALLY**			All general information applicable to building structure completions as a whole and information applicable to two or more Elements from (31) EXTERNAL WALLS: COMPLETIONS WITHIN OPENINGS to (38) Reserved.
30	**See Site Elements**			
31	**EXTERNAL WALLS: COMPLETIONS WITHIN OPENINGS**	Doors, windows, frames and composites of these Completions of all other openings in external walls Ironmongery Glazing Shutters, awnings and canopies Decoration to foregoing	Sills and lintels – see (21) EXTERNAL WALLS Doors and windows integral with walls – see (21) EXTERNAL WALLS Continuous screens and continuous shopfronts having the nature of walls – see (21) EXTERNAL WALLS	For design cost control purposes, the cost of Sills, lintels, and relevant damp-proof courses should be added to the cost of (31) EXTERNAL WALLS: COMPLETIONS WITHIN OPENINGS.
32	**INTERNAL WALLS, PARTITIONS: COMPLETIONS WITHIN OPENINGS**	Doors, windows, frames and composites of these Sliding/folding doors and partitions Hatches and serveries Access panels and removable duct covers Ironmongery Glazing Decoration to foregoing	Sills and lintels built into walls – see (22) INTERNAL WALLS, PARTITIONS Doors and windows integral with walls – see (22) INTERNAL WALLS, PARTITIONS Continuous screens and continuous shopfronts having the nature of walls OR PARTITIONS – see (22) INTERNAL WALLS, PARTITIONS Free-standing screens, space dividers which have the character of fittings – see (76) STORAGE, SCREENING FITTINGS	For design cost control purposes, the cost of Sills and lintels should be added to the cost of (32) INTERNAL WALLS, PARTITIONS: COMPLETIONS WITHIN OPENINGS.

	Structure Completions	Include	Exclude	Other
33	**FLOORS, GALLERIES: COMPLETIONS**	Hearths Machine bases Stages and rostrums Continuous access and cavity floors Access panels in floors (not integral with floors), including trap doors and frames Balustrades Ironmongery Decoration to foregoing		
34	**STAIRS, RAMPS: COMPLETIONS**	Handrails Balustrades and barriers to any vertical drop or as a crowd control device Decoration to foregoing		
35	**SUSPENDED CEILINGS**	Suspended ceilings, however formed Ceiling walkways Jointless, panelled, tiled and boarded ceilings Insulation Cavity barriers Laylights Decoration to foregoing	Ceilings fixed directly to floor or roof structures – see (45) CEILING FINISHES	
37	**ROOFS: COMPLETIONS**	Roof doors and windows Rooflights Trap doors and access panels Balustrades Walkways Ironmongery Decoration to foregoing		For design cost control purposes, the cost of Lift-shaft roof completions should be added to the cost of (66) TRANSPORT.

Finishes

Applied finishes to a surface which is already in position including preparatory work, sub-layers and supports.

	Finishes	Include	Exclude	Other
4-	**FINISHES GENERALLY**			All general information applicable to building finishes as a whole and information applicable to two or more Elements from (41) WALL FINISHES EXTERNALLY to (48) Reserved.
40	**See Site Elements**			
41	**WALL FINISHES EXTERNALLY**	Coatings Applied non-structural sheeting and masonry skins Tiling, slating, and associated battens, supports and flashings Insulation integral with applied finishes Decoration		For design cost control purposes, the cost of Applied finishes to walls to roof spaces, parapets and copings should be added to the cost of (47) ROOF FINISHES.
42	**WALL FINISHES INTERNALLY**	Coatings Tiling, linings, sheeting, and associated battens, supports and flashings Insulation integral with applied finishes Decoration		
43	**FLOOR FINISHES**	Applied finishes, sheeting and tiling Coatings, including screeds Associated items, including skirtings, mat frames and recess covers set in screeds Insulation integral with applied finishes Decoration	Integral floor finishes – see (13) FLOORS IN SUBSTRUCTURE and (23) FLOORS, GALLERIES	

	Finishes	Include	Exclude	Other
44	**STAIRS, RAMPS: FINISHES**	Coatings, including screeds Applied finishes, sheeting and tiling Associated items, including skirtings Decoration		
45	**CEILING FINISHES**	Coatings Applied finishes, e.g. plasterboard, sheeting and tiling, including trimmings Decoration	Suspended ceilings – see (35) SUSPENDED CEILINGS	
47	**ROOF FINISHES**	Sheeting, slating, tiling and associated battens and sarking Waterproof coatings and screeds Insulation Roof paving Flashings Edgings Decoration		

Services (Mainly Piped and Ducted)

Building services are included in this Element Group.
For relevant site services and for storage, see (50) SITE SERVICES (MAINLY PIPED AND DUCTED).

For design cost control purposes, the cost of builder's work in connection with services should be added to the cost of the relevant Element attracting builder's work.

	Services (Mainly Piped and Ducted)	Include	Exclude	Other
5-	**SERVICES (MAINLY PIPED AND DUCTED)**			All general information applicable to building services (mainly piped and ducted) as a whole and information applicable to two or more Elements from (51) HEATING CENTRE to (58) OTHER SERVICES (MAINLY PIPED AND DUCTED).
50	**See Site Elements**			
51	**HEATING CENTRE**	Boiler plant Fuel supply and storage integral with building Isolated chinmeys Flues Control systems	Chimneys integral with external walls – see (21) EXTERNAL WALLS Chimneys integral with internal walls – see (22) INTERNAL WALLS, PARTITIONS Chimneys integral with frames – see (29) FRAMES Site Storageof fuel supply – see (50), SITE SERVICES (MAINLY PIPED AND DUCTED	For design cost control purposes, the cost of Chimneys should be added to the cost of (51) HEATING CENTRE.
52	**DRAINAGE AND REFUSE DISPOSAL**	Rainwater disposal systems Sewage and waste water disposal systems Chemical, gaseous and solvent waste disposal systems Refuse collection and disposal systems	Rainwater disposal systems integral with roof structure – see (27) ROOFS	

	Services (Mainly Piped and Ducted)	Include	Exclude	Other
53	**WATER DISTRIBUTION**	Storage and distribution of: Cold water Drinking water Treated water Chilled and cooling water (where not included in (55) SPACE COOLING or (57) VENTILATION AND AIR CONDITIONING) Hot water Control systems	Sprinkler and fire fighting systems – see (65) SECURITY AND PROTECTION	For design cost control purposes, the cost of Tank Rooms should be added to the cost of (53) WATER DISTRIBUTION.
54	**GASES DISTRIBUTION**	Storage and distribution of: Combustible (non-fuel) gases Medical gases Industrial gases Steam and condensate (where not required for space heating) Compressed air and vacuum Control systems	Pneumatic conveyors – see (66) TRANSPORT	
55	**SPACE COOLING**	Cooling plant Central installations, including distribution Local appliances Control systems	Ventilation and air conditioning cooling – see (57) VENTILATION AND AIR CONDITIONING	For design cost control purposes, the cost of Plant rooms should be added to the cost of (55) SPACE COOLING.
56	**SPACE HEATING**	Central installations, including distribution (hot water, steam, ducted air, electricity) Local appliances Control systems	Ventilation and air conditioning heating – see (57) VENTILATION AND AIR CONDITIONING	For design cost control purposes, the cost of Plant rooms should be added to the cost of (56) SPACE HEATING.
57	**VENTILATION AND AIR CONDITIONING**	Central and local installations Control systems		For design cost control purposes, the cost of Plant rooms should be added to the cost of (57) VENTILATION AND AIR CONDITIONING.
58	**OTHER SERVICES (MAINLY PIPED AND DUCTED)**			

Services (Mainly Electrical)

Building services are included in this Element Group.
For relevant site services, see (60) SITE SERVICES (MAINLY ELECTRICAL).

For design cost control purposes, the cost of builder's work in connection with services should be added to the cost of the relevant Element attracting builder's work.

	Services (Mainly Electrical)	Include	Exclude	Other
6-	**SERVICES (MAINLY ELECTRICAL)**			All general information applicable to building services (mainly electrical) and information applicable to two or more Elements from (61) ELECTRICAL SUPPLY AND MAIN DISTRIBUTION to (68) OTHER SERVICES (MAINLY ELECTRICAL).
60	**See Site Elements**			
61	**ELECTRICAL SUPPLY AND MAIN DISTRIBUTION**	Incoming supply Generating plant Transformers Central earthing Central and local switchgear Power factor correction equipment Standby power supply plant Distribution cabling Distribution boards		
62	**POWER**	General power outlets Special purpose power outlets (extra low voltage, direct current) Supplies to services, supplies to equipment Local earthing and bonding		

	Services (Mainly Electrical)	Include	Exclude	Other
63	**LIGHTING**	Primary, secondary and emergency lighting circuits and equipment		
64	**COMMUNICATIONS**	Audio, visual and electronic communication systems Energy monitoring systems	Physical conveyance systems – see (66) TRANSPORT	
65	**SECURITY AND PROTECTION**	Fire protection including sprinkler and other piped systems Security installations Other protection services Associated circuits and controls Lightning protection		
66	**TRANSPORT**	Lifts and other mechanical conveyance systems		For design cost control purposes, the cost of Lift shafts and associated rooms should be added to the cost of (66) TRANSPORT.
68	**OTHER SERVICES (MAINLY ELECTRICAL)**			

Fittings and Furniture

Building fittings and furniture, both fixed and loose, if supplied within the building contract, are included in this Element Group. For site fittings, see (70) SITE FITTINGS.

	Fittings and Furniture	Include	Exclude	Other
7-	**FITTINGS AND FURNITURE GENERALLY**			All general information applicable to building fittings and furniture as a whole and information applicable to two or more Elements from (71) DISPLAY, CIRCULATION FITTINGS to (78) Reserved.
70	**See Site Elements**			
71	**DISPLAY, CIRCULATION FITTINGS**	Visual information items Circulation equipment Internal landscaping fittings		
72	**WORK, REST, PLAY FITTINGS**	Work-stations Desks Tables Seating Beds Sport fittings		
73	**CULINARY FITTINGS**	Work-tops Food storage Refrigerators Cooking equipment Washing equipment Food and drink vending machines Drinking fountains Tableware Kitchenware		

	Fittings and Furniture	Include	Exclude	Other
74	**SANITARY, HYGIENE FITTINGS**	Baths Showers Wash basins Wcs Urinals Mirrors Associated fittings		
75	**CLEANING, MAINTENANCE FITTINGS**	Washing, cleaning and drying equipment		
76	**STORAGE, SCREENING FITTINGS**	Cupboards, cabinets, shelving Wardrobes Safes Lockers Cloak room fittings Curtains and rails Blinds Portable folding screens	Room dividers not used for storage – see (22) INTERNAL WALLS, PARTITIONS and (32) INTERNAL WALLS, PARTITIONS: COMPLETIONS WITHIN OPENINGS	

Site Elements (Direct Costs)

External work to site which is not included in the building Element Groups.

	Site Elements (Direct Costs)	Include	Exclude	Other
-0	**SITE GENERALLY**			All information applicable to the site as a whole and information applicable to two or more Elements from (10) PREPARED SITE to (80) LANDSCAPE, PLAY AREAS
10	**PREPARED SITE**	Clearing site Demolition Excavation Filling and shaping ground Underpinning and shoring of adjoining structures	Similar items directly connected with the building proper – see (11) GROUND, EARTH SHAPES	
20	**SITE STRUCTURES**	Minor structures not primarily for human habitation Ducts and tunnels for services Decorative features		For design cost control purposes *The cost of* — *Should be added to the cost of* Isolated chimneys — (51) HEATING CENTRE Fuel storage systems not integral with building — (50) SITE SERVICES Bunkers and bund walls — (50) SITE SERVICES

	Site Elements (Direct Costs)	Include	Exclude	Other
30	**SITE ENCLOSURES**	Walls, fences, gates, screens, retaining walls Controlled entrances Barriers Bollards Decoration		
40	**ROADS, PATHS, PAVINGS**	Hardstandings Kerbs Edging Cattle grids Road markings		
50	**SITE SERVICES (MAINLY PIPED AND DUCTED)**	The equivalent of (51) to (58) on the site Water supply and site storage not integral with building Fuel supply and site storage not integral with building Surface water drains Foul drains, sewers and septic tanks Bunkers and bund walls		

	Site Elements (Direct Costs)	Include	Exclude	Other
60	**SITE SERVICES (MAINLY ELECTRICAL)**	The equivalent of (61) to (68) on the site Incoming electrical mains Outdoor lighting Telephone Public address Television Cabling		For design cost control purposes, the cost of Incoming electrical mains should be added to the cost of (61) ELECTRICAL SUPPLY AND MAIN DISTRIBUTION.
70	**SITE FITTINGS**	Notice boards Flower containers Litter bins Outdoor benches Playground equipment Flag poles Plaques		
80	**LANDSCAPE, PLAY AREAS**	Shrubs, trees and plants Grassed areas and playing areas Hard playing areas Ornamental paving and pools Sculpture Running tracks Swimming pools All related fencing		

Indirect Costs (Building and Site)

Indirect costs related to the project as a whole (buildings, site, connective alterations, repairs and special works).

	Indirect Costs (Building and Site)	Include	Exclude	Other
06	**PRELIMINARIES**	Plant and vehicles which cannot be allocated to any one element or group of elements Temporary works, including temporary site communications Protection Watching Hoardings Drying out the works Testing Site supervision Overheads		
07	**INSURANCES**	Charges for bonds and general insurances such as fire, flood, storm, tempest, injury to persons, damage to property, theft		
08	**CONTINGENCIES**	The total sum set aside for unforeseen requirements.	Provisional sums set aside for work the nature of which can be foreseen but the extent of which cannot be foreseen.	