

## **ELEMENTAL COST BREAKDOWN**

COMPRISING -

PART (A) - PROJECT PARTICULARS

PART (B)(i) - ELEMENTAL COST BREAKDOWN - BLOCK PARTICULARS

(B)(ii) - ELEMENTAL COST BREAKDOWN - SUMMARY

PART (C) - OUTLINE SPECIFICATION

PART (D) - DOMESTIC FLOOR PLANS AND ELEVATIONS

## **Explanatory Notes**

1. Figures should be rounded to 2 decimal places for Items B7, B8, B10 to B12 and 3 decimal places for Items B13 to B20 of Part (B)(i).
2. Fluctuations have been excluded from all costs entered but indicated as a separate amount in Item 2.6 in Part (B)(ii).
3. Outline Specification at Part (C) have been modified to suit cost model project.
4. Any relevant observations on individual elements have been entered in the "Remarks" column in Part (B)(ii).
5. All projects and price information given herein are restricted material and only for internal reference within Housing Department.

Block Type : Non-standard Cruciform Other SSF Block  
for June 2024 Construction Cost Yardsticks

**PART (A) - PROJECT PARTICULARS**

<b>A1</b>	Title :	ECB for Non-standard Cruciform Block (Other Subsidised Sale Flats) for June 2024 Construction Cost Yardsticks
<b>A2</b>	Project :	Construction of Public Housing Development at Kai Tak Site 2B2
<b>A3</b>	Contract No. :	20200392
<b>A4</b>	Location :	Kai Tak Site 2B2
<b>A5</b>	Scope of Works :	1 No. 41-storey Non-standard Cruciform Block (Block B), all associated drainage and external works etc.
<b>A6</b>	Tender in Date :	N/A
<b>A7</b>	HD's Tender Price Index :	N/A
<b>A8</b>	Contract Period :	N/A
<b>A9</b>	Contract Sum :	N/A
<b>A10</b>	Project Manager :	N/A
<b>A11</b>	Contract Manager :	CA/4
<b>A12</b>	Structural Engineer :	CSE/3
<b>A13</b>	Building Services Engineer :	CBSE/2
<b>A14</b>	Quantity Surveyor :	CQS/1
<b>A15</b>	Main Contractor :	N/A
<b>A16</b>	Remarks :	
	(Please state any particular constraints/special conditions that would affect the costing as compared to a site of normal condition (e.g. Infilled/congested site, difficult site access etc.))	

**PART (B)(i) - Elemental Cost Breakdown - Block Particulars**

<b>B1</b>	No. of blocks/building type	1	No.
<b>B2</b>	Total no. of domestic flats :	800	
<b>B3</b>	Total no. of bathrooms :	800	
<b>B4</b>	No. of balconies :	N/A	
<b>B5</b>	No. of bay windows :	N/A	
<b>B6</b>	No. of domestic flats per floor :	20	
<b>B7</b>	Construction Floor Area (CFA) # :	Total CFA : 38,321.00	m <sup>2</sup>
		CFA of refuge floors included in total CFA :	N/A m <sup>2</sup>
		CFA of skygardens/planting area included in total CFA :	N/A m <sup>2</sup>
		CFA of balconies included in total CFA :	N/A m <sup>2</sup>
		CFA of bay windows included / not included* in total CFA :	N/A m <sup>2</sup>
		CFA (incl. balconies and bay windows) of each typical floor :	912.80 m <sup>2</sup>
<b>B8</b>	Elevation area :	36,008.01	m <sup>2</sup>
	(the elevation area should exclude area for feature/fittings such as water tanks, fins, etc. at roof level and ground floor, i.e. from first floor up to the top of parapets, if any)		
<b>B9</b>	No. of storeys :	41	(G/F + 40 domestic storeys)
<b>B10</b>	Overall building height :	126.43	m (G/F to Upper Roof)
<b>B11</b>	Typical storey height :	2.75	m
<b>B12</b>	Ground floor area :	1,077.96	m <sup>2</sup>

For superstructure only	Unit	Ratio	Remarks, if any
<b>B13</b> Total volume of reinforced concrete / CFA	m <sup>3</sup> /m <sup>2</sup>	<b>0.479</b>	- Excluding volume of precast concrete components
<b>B14</b> Total formwork area / CFA (total area of formwork should include those quantities measured linear in the bills, multiplied by the mean widths of the relevant ranges)	m <sup>2</sup> /m <sup>2</sup>	<b>3.056</b>	
<b>B15</b> Total wall formwork area / CFA (total area of formwork should include those quantities measured linear in the bills, multiplied by the mean widths of the relevant ranges)	m <sup>2</sup> /m <sup>2</sup>	<b>2.500</b>	
<b>B16</b> Total weight of steel reinforcement / total volume of reinforced concrete in superstructure (total weight of reinforcement should include fabric reinforcement measured number in the bills, multiplied by the weight per number)	kg/m <sup>3</sup>	<b>220.918</b>	- Total quantity of reinforcement is / is-not* provisional - Excluding quantities in precast concrete components
<b>B17</b> Total weight of steel reinforcement / CFA (total weight of reinforcement should include fabric reinforcement measured number in the bills, multiplied by the weight per number)	kg/m <sup>2</sup>	<b>105.759</b>	- Total quantity of reinforcement is / is-not* provisional - Excluding quantities in precast concrete components
<b>B18</b> Elevation area / CFA (the elevation area should exclude area for feature/fittings such as water tanks, fins, etc. at roof level and ground floor, i.e. from first floor up to the top of parapets, if any)	m <sup>2</sup> /m <sup>2</sup>	<b>0.940</b>	
<b>B19</b> Total perimeter of domestic floor / CFA	m/m <sup>2</sup>	<b>0.337</b>	
<b>B20</b> Total window area / CFA	m <sup>2</sup> /m <sup>2</sup>	<b>0.202</b>	

\* delete as appropriate

# to be calculated according to DCMBI P24/00 (August 2002 revision)

**PART (B) (ii) - Elemental Cost Breakdown - Summary**

Block Type: Non-standard Cruciform Other SSF Block  
for June 2024 Construction Cost Yardsticks

**FOR REFERENCE ONLY**

Preliminaries included in 1.1, 2.1 to 2.2 and 2.4 : 18.05 %		\$/m2CFA (June 2024)	Remarks, if any
1. Substructure			
1.1 Columns, structural walls, slabs, beams, lift pits etc. (below structural floor level of ground floor)		97.00	
1.2 Pile caps and footings		-	
1.3 Raft Foundations		-	
<b>Sub-total (1.) :</b>		<b>97.00</b>	
2. Superstructure			
2.1 Concrete structure (including external walls)			
2.1.1 Cast in-situ frame		2,967.48	
2.1.2 External walls			
2.1.2.1 Non-structural external walls		-	
2.1.2.2 Precast facade		553.45	
2.1.3 Precast concrete structural components e.g. walls, beams, bath & kitchen units, slabs and staircases etc.		1,901.17	
2.1.4 Transfer structures		285.20	
2.1.5 Others (Filling and waterways)		6.41	
<b>Sub-total (2.1) :</b>		<b>5,713.71</b>	
2.2 Architectural, Builder's Work and Finishes Include non-structural partitions, carpentry & joinery, steel and metalwork, finishes, plumbing, etc.			
2.2.1 Internal non-structural partition walls		202.96	
2.2.2 Internal finishes			
2.2.2.1 Internal floor finishes		260.00	
2.2.2.2 Internal wall finishes		475.18	
2.2.2.3 Internal ceiling finishes		98.23	
2.2.3 Roof finishes (including waterproofing)		48.72	
2.2.4 External finishes			
2.2.4.1 External floor finishes		-	
2.2.4.2 External wall finishes		331.55	
2.2.4.3 External ceiling finishes		2.07	
2.2.5 Fittings & fixtures (including cabinets, cooking benches, balustrades and handrails, etc.)		369.27	
2.2.6 Windows		616.83	
2.2.7 Doors		589.29	
2.2.8 Sanitary fittings		70.40	
2.2.9 Plumbing installation (excluding sanitary fittings)		663.79	
2.2.10 Builder's Works in connection with services		199.69	
2.2.11 Builder's profit and attendance on M&E services		21.97	
2.2.12 Others (please specify)		-	
<b>Sub-total (2.2) :</b>		<b>3,949.95</b>	
2.3 Building Services			
2.3.1 Electrical Installation		1,281.17	
2.3.2 Fire Services and Water Pump Installations		239.62	
2.3.3 Lift Installation		332.21	
2.3.4 MVAC Installation		-	
2.3.5 Security, CABD & STDN Installation		-	Included in Item 2.3.1
2.3.6 Gas Installation		-	
2.3.7 Automated Refuse Collection System		-	
2.3.8 Others (please specify)		-	
<b>Sub-total (2.3) :</b>		<b>1,853.00</b>	
<b>Total (1. to 2.3):</b>		<b>11,613.66</b>	
2.4 Others (Taking Care of the Works after completion, Intake Ambassadors)		19.81	
<b>Sub-total (2.4) :</b>		<b>19.81</b>	
2.5 Contingencies (apportioned)		220.53	
<b>Sub-total (2.5) :</b>		<b>220.53</b>	
<b>Total (1. to 2.5) :</b>		<b>11,854.00</b>	
2.6 Fluctuations (apportioned)		562.00	
<b>Sub-total (2.6) :</b>		<b>562.00</b>	
<b>Grand total :</b>		<b>12,416.00</b>	

**PART (C) - OUTLINE SPECIFICATION****1. Substructure (including columns, structural walls, slabs, beams, lift pits, etc. below structural floor level of ground floor)**

- 1.1 Reinforced concrete walls, columns, slabs, beams, ground beams, finishes to cable trenches
- 1.2 Pile caps and footings  
N/A
- 1.3 Raft Foundations  
N/A

**2. Superstructure****2.1 Concrete structure (including external walls)****2.1.1 Cast in-situ frame**

Generally conventional in-situ reinforced concrete load-bearing walls and beams framing with reinforced concrete suspended slabs

**2.1.2 External walls****2.1.2.1 Precast facade**

Generally precast concrete facades units

**2.1.3 Precast concrete structural components**

Generally volumetric precast bathrooms, volumetric precast kitchens, precast concrete or semi-precast concrete slabs, precast concrete staircases and landings, precast concrete wall, precast concrete water tanks, precast tie beams etc.

**2.1.4 Transfer structures**

Generally in-situ reinforced concrete transfer plates and transfer beams

**2.1.5 Others**

Nil

**2.2 Architectural, Builder's Work and Finishes**

Include non-structural partitions, carpentry & joinery, steel & metalwork, finishes, plumbing, etc.

**2.2.1 Internal non-structural partition walls**

- i. Inside domestic flats - Panel wall partitions
- ii. Other areas - Generally solid concrete block walls, precast concrete curbs and lintels

**2.2.2 Internal finishes****2.2.2.1 Internal floor finishes**

- |   |  |
|---|--|
| i. Entrance Lobby                                   | - Non-slip homogeneous tiles and screed                                  |
| ii. Typical Floor Lift Lobbies and Corridors        | - Non-slip homogeneous tiles and screed                                  |
| iii. Bedrooms, Living and Dining Rooms              | - Power float or steel trowel  |
| iv. Bathrooms                                       | - Non-slip homogeneous tiles and screed on waterproofing                 |
| v. Kitchens   | - Non-slip homogeneous tiles and screed on waterproofing                 |
| vi. Services Rooms                                  | - Cement sand screed only  |
| vii. Staircases and Protected Lobbies of Staircases | - Generally screed on landing and fairfaced finish with nosing on flight |
| viii. Refuse Storage and Materials Recovery Rooms   | - Quarry tiles and screed on waterproofing                               |

**PART (C) - OUTLINE SPECIFICATION****2.2.2.2 Internal wall finishes**

- |   |  |
|---|--|
| i. Entrance Lobby                                   | - Generally ceramic tiles at lower portion with emulsion paint on skim coat above on fair-faced concrete   |
| ii. Typical Floor Lift Lobbies and Corridors        | - Homogeneous skirting tiles and acrylic paint with texture coat on skim coat on fairfaced concrete or on rendering  |
| iii. Bedrooms, Living and Dining Rooms              | - Emulsion paint on skim coat on fairfaced concrete or panel wall  |
| iv. Bathrooms                                       | - Coloured glazed ceramic tiles on rendering and waterproofing or on waterproofing on panel wall at lower portion with emulsion paint on skim coat above on rendering or on panel wall |
| v. Kitchens   | - Coloured glazed ceramic tiles on rendering and waterproofing or on waterproofing on panel wall at lower portion with emulsion paint on skim coat above on rendering or on panel wall |
| vi. Services Rooms                                  | - Emulsion paint on skim coat on fairfaced concrete or on rendering  |
| vii. Staircases and Protected Lobbies of Staircases | - Acrylic paint on skim coat on fairfaced concrete or on rendering   |
| viii. Refuse Storage and Materials Recovery Rooms   | - Glazed ceramic tiles   |

**2.2.2.3 Internal ceiling finishes**

- |   |  |
|---|--|
| i. Entrance Lobby                                   | - Proprietary aluminium suspended ceilings and emulsion paint on skim coat on fairfaced concrete |
| ii. Typical Floor Lift Lobbies and Corridors        | - Acrylic paint on skim coat on fairfaced concrete   |
| iii. Bedrooms, Living and Dining Rooms              | - Emulsion paint on skim coat on fairfaced concrete  |
| iv. Bathrooms                                       | - Emulsion paint on skim coat on fairfaced concrete  |
| v. Kitchens   | - Emulsion paint on skim coat on fairfaced concrete  |
| vi. Services Rooms                                  | - Emulsion paint on skim coat on fairfaced concrete  |
| vii. Staircases and Protected Lobbies of Staircases | - Acrylic paint on fairfaced concrete (or on skim coat for protected lobbies)                    |
| viii. Refuse Storage and Materials Recovery Rooms   | - External emulsion paint on skim coat on fairfaced concrete                                     |

**2.2.3 Roof finishes (including waterproofing)**

Generally precast concrete tiles on proprietary waterproof membrane roofing on insulation and screed to falls including aluminium flashing

**2.2.4 External finishes****2.2.4.1 External floor finishes**

N/A

**2.2.4.2 External wall finishes**

Generally finished with acrylic paint with texture coat

**2.2.4.3 External ceiling finishes**

Generally finished with acrylic paint without texture coat

**2.2.5 Fittings & fixtures (including cabinets, cooking benches, balustrades and handrails, etc.)**

The following built-in fittings are provided : -

Prefabricated sink units and adjustable polymer resin cooking bench units, mirrors, laundry racks for domestic flats  
Letter boxes, pipe duct doors, refuse chutes, access panels, hose reel cabinets, cat ladders, signage, security counters and sundry built-in items

**2.2.6 Windows**

Clear anodized aluminum windows with clear float glass or patterned glass

**PART (C) - OUTLINE SPECIFICATION****2.2.7 Doors**

- |       |  |   |  |
|-------|--|---|--|
| i.    | Flat Entrances                           | - | 54 mm thick doorsets to achieve -/60/60 minutes fire resistance rating (FRR) requirement |
| ii.   | Kitchens                                 | - | 50 mm thick doorsets to achieve -/30/30 minutes FRR requirement with glass panels        |
| iii.  | Bathrooms                                | - | 46 mm thick doorsets and proprietary plastic folding doorsets                            |
| iv.   | Staircases                               | - | 50 mm thick doorsets to achieve -/30/30 minutes FRR requirement                          |
| v.    | Typical Floor Services Rooms             | - | Doorsets to achieve -/60/60 minutes FRR requirement                                      |
| vi.   | Ground Floor and Roof Services Rooms     | - | Metal doors  |
| vii.  | Refuse Storage & Material Recovery Rooms | - | Proprietary doorsets to achieve -/60/60 minutes FRR requirement with glass panels        |
| viii. | Hose Reels and Water Meter Cabinets      | - | Metal doors  |
| ix.   | Ironmongeries for Doors                  |   |  |

**2.2.8 Sanitary fittings**

Sanitary fittings equal to SSF standard or equivalent

**2.2.9 Plumbing installation (excluding sanitary fittings)**

- |       |   |   |  |
|-------|---|---|--|
| i.    | Rainwater disposal system               | - | Generally plastic pipes and coated cast iron pipes with roof outlets, etc.   |
| ii.   | Soil, waste and ventilation pipe system | - | Generally coated cast iron pipes, epoxy coated cast iron pipes and plastic pipes with P-traps, W-traps, floor drains, etc. |
| iii.  | Cold water system                       | - | Generally copper pipes, insulated copper pipes, and ductile iron pipes   |
| iv.   | Hot water system                        | - | Insulated coated copper pipes  |
| v.    | Flushing water system                   | - | Generally plastic pipes and ductile iron pipes   |
| vi.   | Cold water for fire services system     | - | Generally galvanized steel pipes   |
| vii.  | Floor washing system                    | - | Generally copper pipes   |
| viii. | Drain pipes for air conditioners        | - | Generally plastic pipes  |
| ix.   | Irrigation system                       | - | Generally copper pipes and plastic pipes   |

**2.2.10 Builder's Works in connection with services**

Hose reel nozzle enclosures, fire resistance enclosures and cover plates to E&M adaptable boxes, concrete plinths and machine bases, earthing terminals, lightning protection, etc.

**2.2.11 Builder's profit and attendance on M&E services**

Profit and attendance have been allowed for Electrical Installation, Fire Services and Water Pump Installation, Lift Installation

**2.2.12 Others**

Nil

**2.3 Building Services****2.3.1 Electrical Installation**

Main and sub-main LV distribution system LV switchboard, switchgears, armoured/non-armoured cables, fire resistant cables and bus ducts  
Electrical risers, sub-circuit wiring including concealed conduits, standard light fittings to common circulation areas and emergency generator  
All electric provisions within domestic flats including MCCB, RCB, sockets, switches, etc.

**2.3.2 Fire Services and Water Pump Installations**

Hose reels, fire hydrants and hand operated fire fighting appliances generally  
F.S. water pumps, pipework and accessories for fire hydrant and hose reel systems  
Water pumps for cold water system and flushing water system

**2.3.3 Lift Installation**

6 No. Passenger lifts serving 40 domestic storeys to Block B

**2.3.4 MVAC Installation**

N/A

**PART (C) - OUTLINE SPECIFICATION****2.3.5 Security, CABD & STDN Installation**

Intercom phone to each flat, panic alarm, CCTV to lift cars and entrance  
CCTV cameras provided at front entrances are integrated with the CABD system  
BMS, CABD, STDN installation and telephone outlets to all rooms

**2.3.6 Gas Installation**

Gas distribution pipe work, gas water heaters to kitchens and bathrooms

**2.3.7 Refuse Handling System Installation**

N/A

**2.3.8 Others**

N/A

**2.4 Others**

See Part (B)(ii) - Elemental Cost Breakdown - Summary