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REPORT ON COMPARATIVE COSTS

Stepoc 325 vs Alternative System

Objective
To examine to costs and resourcing of the Stepoc retaining wall system against other commonly used or competitive systems or products.

CLARIFICATIONS

Cost and Profit
This report evaluates the cost only of the construction of the systems evaluated and makes no assumptions of mark-up or profit on the systems delivered.

Systems Analysed
Drawings provided by Ibstock.

- Insitu walls
- Cavity block wall
- Stepoc 325 system

Headline Costs
The headline rates section shows the summary total cost of the system addressed based on the parameters above on the various systems analysed against Stepoc wall equivalent.

The headline rates give the costs of a 20m section of each time of wall as well as the resource costs of the system.

Resource costs are materials, labour plant or specialist subcontractor.

Man-days
The headline rates also crucially report on the man-days output for each system.

The cost per m^2 shown should be viewed against the man-days on the basis that release of labour for additional tasks may be more economical than a less expensive build system.

Accurate as of March 2024

HEADLINE COSTS

Models

The following are the headline rates calculated for one unit of the various systems.

These rates are applied to the details and quantities of each scheme below.

1	**Standard Formwork model**	U	£
1.1	Shuttering model for Stepoc wall project	m^2	177.65
1.2	Concrete to shuttering	m^2	57.65
1.3	Reinforcement to formwork wall system	m^2	25.26
1.4	Strike formwork	m^2	19.14
	Model costs / m^2	m^2	279.70

2	**Stepoc**		
2.1	Stepoc 325 Model Blockwork only	m^2	100.35
2.2	Stepoc 325 Model Blockwork reinforcement and filling	m^2	86.99
	Model costs / m^2	m^2	187.34

3	**Hollow Concrete Blockwork**		
3.1	Standard Hollow Blockwork 440 x 225 x 225 mm; Concrete filled	m^2	14.16
3.2	Reinforcement 12mm fixed	**m^2**	126.94
	Model costs / m^2	m^2	141.10

HEADLINE COSTS FOR ALL SCHEMES

Wall type vs Stepoc 325

Insitu walls

	Materials £	Labour £	Plant £	Cost Total £	Man-Days
Insitu	6378.7486	9436.4087	252	16066.7652	35.74
Stepoc	7458.9811	3011.679	189	10659.646	11.41

Cavity wall section 30A

	Materials £	Labour £	Plant £	Cost Total £	Man-Days
Cavity wall	3627.32	6496.26	566.28	10690.27	27.07
Stepoc	5617.13	2597.99	299.39	8514.55	10.82

Cavity wall section 30B

	Materials £	Labour £	Plant £	Cost Total £	Man-Days
Cavity wall	2388.94	4928.18	550.17	7867.61	20.53
Stepoc	3465.27	1573.55	260.86	5299.8	6.56

SCHEMES ANALYSED

Retaining wall 2.847m high x 20m long.

Brief description

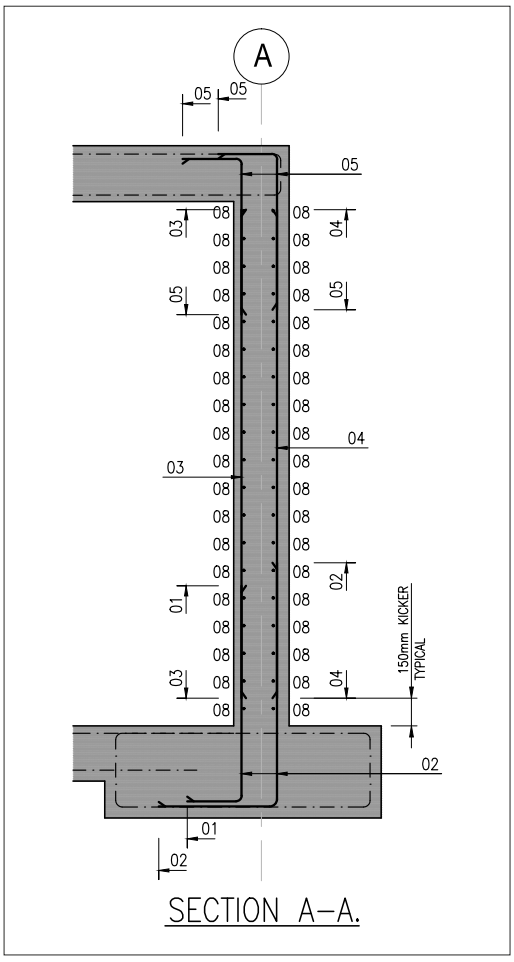
Specified retaining wall for a basement. Shuttered retaining wall; 300mm thick. The comparison has been priced against a system of 325mm Stepoc and an insitu system.

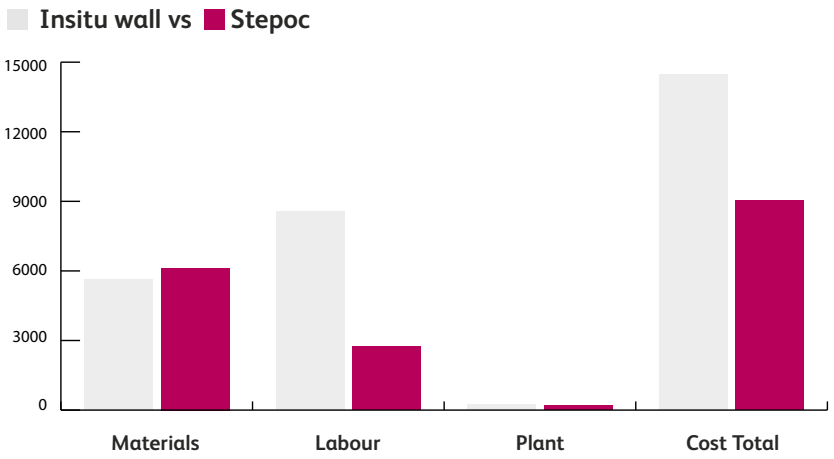
300mm concrete wall - 2.845 high		
Wall B- vkhp Consulting		
Concrete in wall	m^3	17.07
Shuttering to wall	m^2	113.80
Reinforcing 56.9		
Vertical bars H12	kg	79.93
Horizontal bars H12	kg	674.88

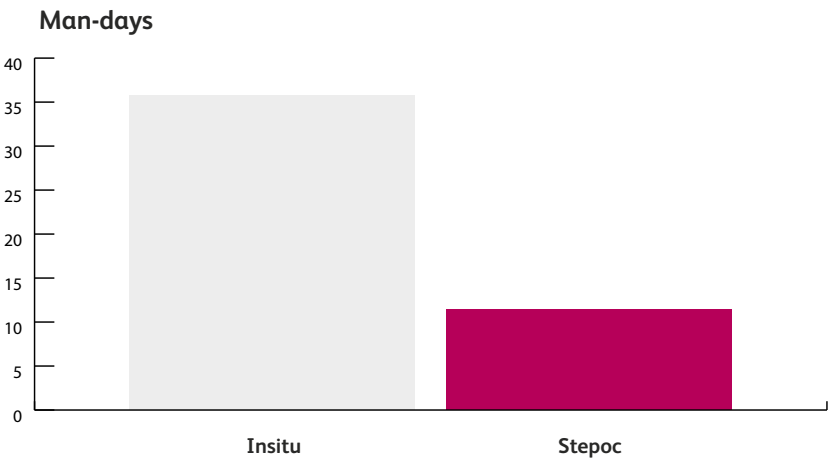
Section from issued drawings - costs of resources for this system

Insitu walls vs Stepoc

	Materials £	Labour £	Plant £	Cost Total £	Man-Days
Insitu	6378.75	9436.41	252.00	16066.77	35.74
Stepoc	6126.83	2737.89	189.00	9053.93	11.41







SCHEMES ANALYSED

Dandara LN37-DS-513.01

Brief description

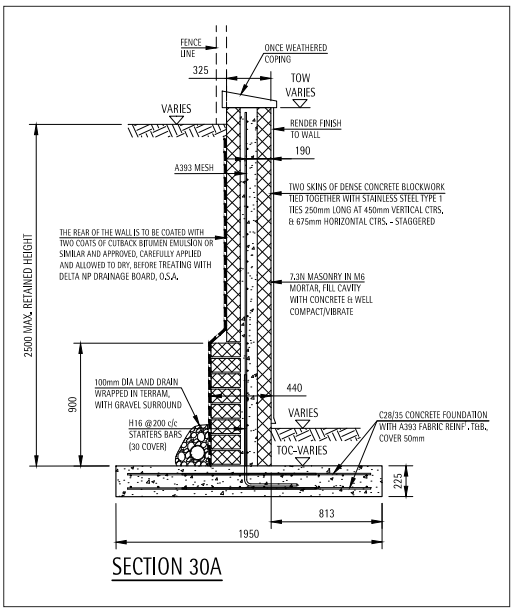
Cavity wall formed of two skins of 100mm blockwork. The cavity is subsequently filled with reinforcing mesh and concrete.

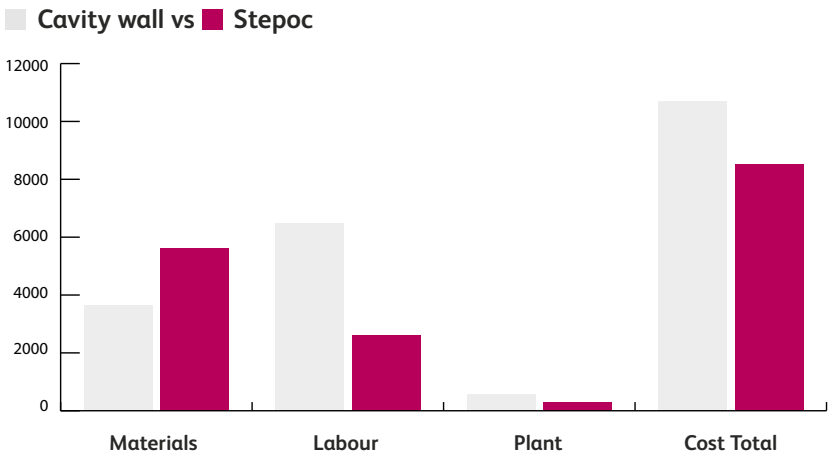
Concrete blockwork - 2.63 high		
Section 30A- Dandara 513.01		
330mm wide cavity wall formed of two skins (7.3N masonry in M6 mortar) of dense concrete blockwork, each skin 100mm wide, tied together with stainless steel ties	m^2	52.60
225mm wide block on flat skin to thicken the base of the retaining wall, 900mm high	m^2	18.00
Stainless steel type 1 ties 250mm long	nr	222.51
A393 mesh reinforcing vertically in cavity	m^2	52.60
Vertical starter bars H16	kg	106.92
Well compacted and vibrated concrete in 130 mm wide cavity	m^3	6.84

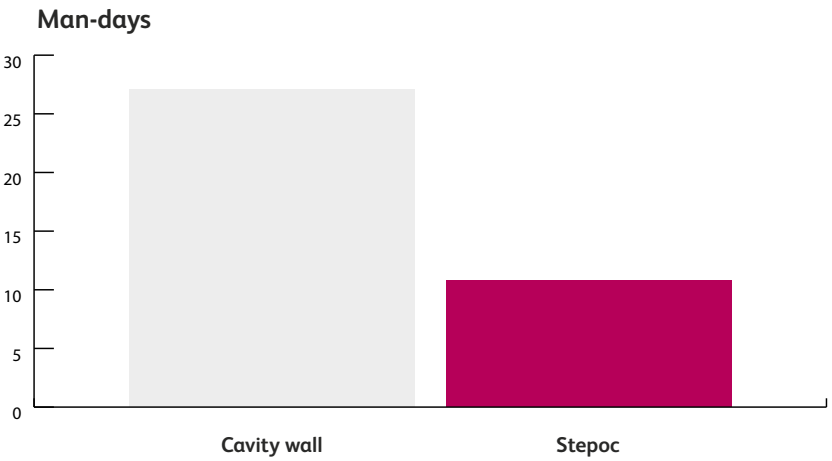
Section from issued drawings - costs of resources for this system

Section 30A - Quantities - 2.63 High

	Materials £	Labour £	Plant £	Cost Total £	Man-Days
Cavity wall	4454.62	7145.89	568.84	12169.35	27.07
Stepoc	6838.25	2857.78	299.39	9995.42	10.82







SCHEMES ANALYSED

Section 30B Concrete Blockwork- 2.63 High

Brief description

Cavity wall formed of two skins of 100mm blockwork. The cavity is subsequently filled with reinforcing mesh and concrete.

Section 30B- Dandara LN37-DS-513.01		
330mm wide cavity wall formed of two skins (7.3N masonry in M6 mortar) of dense concrete blockwork, each skin 100mm wide, tied together with stainless steel ties	m^2	40.60
Stainless steel type 1 ties 250mm long	nr	182.11
A393 mesh reinforcing vertically in cavity	m^2	40.60
Vertical starter bars H12	kg	60.09
Well compacted and vibrated concrete in 130 mm wide cavity	m^3	5.28

Section from issued drawings - costs of resources for this system

Cavity wall section 30B

	Materials £	Labour £	Plant £	Cost Total £	Man-Days
Cavity wall	2985.28	5421.00	552.06	8958.33	20.53
Stepoc	4089.13	1730.90	260.86	6080.89	6.56