

Affordable Modular ECD Centres

Brief Description of solution: Affordable Modular ECD Centres for 20, 40, 60 , 80 & 100 children meeting minimum norms and standards

Features: Steel portal, engineer designed reinforced foundation (up to soil type H2) concrete blocks plastered and painted, metal profiled roof sheeting, aluminum windows, doors, veranda, 20 Amp Prepaid Electrical supply. Designed for maximum natural light, ventilation, low maintenance and incremental growth. Separate ablution block in rural areas. Fitted with rainwater harvesting system. Fencing and outdoor equipment provided.

A typical ECD centre for 80 children comprises of 4 playrooms, veranda, kitchen, lockable pantry, office, sickbay and store

Compliant with local municipality: Rural municipalities but easily adapted for urban use (e.g. adding ablution block to main building with waterborne sanitation facilities and plumbing and drainage to the kitchen)

Time to build: 8 weeks

Cost:	Children	m ²	Playrooms	Cost	R p/m ²	R/child
04/06/2020	40	120	2	R706 526	R5 888	R17 663
	60	160	3	R868 364	R5 427	R14 473
	80	240	4	R1 211 314	R5 047	R15 141
	100	280	5	R1 415 488	R5 055	R14 155

Include ablution facilities, fencing, outdoor equipment & admin costs, excluding VAT



Benefits

- Quality precautions include engineer designed raft foundation suitable for various soil types (H2) and a steel portal / frame
- Standard designs save municipalities on expensive geotechnical investigations, architectural & engineering design fees and costing –easy to upscale (similar to RDP house concept)
- Well ventilated and plenty of natural light
- Movable divider with pigeon holes for children's bags that enables the centre to use the centre for an event e.g. meetings, end of year graduation ceremony, etc.
- Easy to extend without interfering with centre activities
- Low maintenance - building materials obtainable from local hard ware store

COST BREAKDOWN: AFFORDABLE MODULAR ECD NEW BUILDS AND STAND ALONE UNITS/EXTENSIONS

04/06/2020

COST ELEMENT	CAT A: 2 CLASS	CAT A: 3 CLASS	CAT A: 4 CLASS	CAT A: 5 CLASS	CAT B: 2 CLASS	CAT B: 3 CLASS	CAT B: 4 CLASS	CAT B: 5 CLASS
	120M ²	160M ²	240M ²	280M ²	120M ²	160M ²	200M ²	240M ²
	40 CHILDREN	60 CHILDREN	80 CHILDREN	100 CHILDREN	40 CHILDREN	60 CHILDREN	80 CHILDREN	100 CHILDREN
Earthworks & Foundations	R115 575	R153 801	R230 253	R271 701	R115 575	R153 801	R192 027	R230 253
Steel Portals and Roof	R113 111	R146 312	R226 222	R259 423	R113 111	R146 312	R178 110	R211 566
Superstructure - Wet	R80 690	R99 534	R137 940	R166 970	R77 059	R95 925	R117 221	R138 517
Aprons, Tanks and stands	R37 748	R43 908	R74 236	R81 656	R37 748	R43 908	R50 068	R56 228
Finishes	R111 590	R136 902	R195 184	R248 943	R83 811	R102 410	R122 902	R142 177
Security & Safety	R30 434	R39 134	R58 305	R66 840	R36 869	R45 570	R58 305	R66 840
Electrical Installation	R12 500	R14 500	R19 000	R24 000	R7 500	R11 000	R13 500	R17 500
Play Equipment	R45 626	R54 795	R54 795	R54 795	R45 626	R54 795	R54 795	R54 795
Special Installations	R30 599	R37 151	R44 529	R50 255	R89 658	R103 105	R116 551	R133 326
Sundry Items	R -	R -	R -	R -	R -	R -	R -	R -
External Works	R37 968	R41 764	R49 358	R56 951	R37 968	R41 764	R49 358	R56 951
SUB TOTAL A	R615 841	R767 802	R1 089 821	R1 281 534	R644 925	R798 590	R952 837	R1 108 154
Indirect Cost:								
Project Manager	R21 907	R27 226	R38 496	R45 206	R21 907	R27 226	R38 496	R45 206
Clerk of Works	R18 778	R23 336	R32 997	R38 748	R18 778	R23 336	R32 997	R38 748
SUB TOTAL B	R656 526	R818 364	R1 161 314	R1 365 488	R685 609	R849 152	R1 024 331	R1 192 108
Administrative Cost:								
Needs Analysis	R50 000	R50 000	R50 000	R50 000	R50 000	R50 000	R50 000	R50 000
SUB TOTAL B	R706 526	R868 364	R1 211 314	R1 415 488	R735 609	R899 152	R1 074 331	R1 242 108
GRAND TOTAL	R706 526	R868 364	R1 211 314	R1 415 488	R735 609	R899 152	R1 074 331	R1 242 108

COST ELEMENT	STAND ALONE CLASSROOM
Earthworks & Foundations	R 40 156,78
Steel Portals and Roof	R 49 586,85
Superstructure - Wet	R 27 514,29
Aprons, Tanks and stands	R 17 934,56
Finishes	R 19 193,66
Security & Safety	R 10 450,74
Electrical Installation	R 7 500,00
Play Equipment	R 27 287,50
Special Installations	R -
Sundry Items	R -
External Works	R -
SUB TOTAL A	R 199 624,39
<i>Indirect Cost:</i>	
Project Manager	R 21 907,14
Clerk of Works	R 18 777,55
SUB TOTAL B	R 240 309,07
<i>Administrative Cost:</i>	
Needs Analysis	R 50 000,00
SUB TOTAL B	R 290 309,07
GRAND TOTAL	R 290 309,07

COST ELEMENT	KITCHEN & OFFICE
Earthworks & Foundations	R 40 156,78
Steel Portals and Roof	R 49 586,85
Superstructure - Wet	R 33 136,29
Aprons, Tanks and stands	R 17 934,56
Finishes	R 46 919,36
Security & Safety	R 14 311,85
Electrical Installation	R 5 500,00
Play Equipment	R -
Special Installations	R -
Sundry Items	R -
External Works	R -
SUB TOTAL A	R 207 545,70
<i>Indirect Cost:</i>	
Project Manager	R 27 225,76
Clerk of Works	R 23 336,36
SUB TOTAL B	R 258 107,82
<i>Administrative Cost:</i>	
Needs Analysis	R 50 000,00
SUB TOTAL B	R 308 107,82
GRAND TOTAL	R 308 107,82