

HOLLOW AND CEMENT CONCRETE BRICKS

1. INTRODUCTION

Hollow and dense cement concrete blocks known as hollow blocks, have been developed as an alternative to bricks. The products are widely used in construction activity.

The hollow blocks are made of cement, stone chips, stone dust and sand are not only cheaper than bricks but have other specialities as well. These blocks have more tensile strength, the walls constructed from these blocks act as thermal insulators because of their hollowness.

2. MARKET

As the construction activity is growing day by day, there is a good demand for hollow and cement concrete bricks. These blocks find wide applicability and construction cost is largely reduced. It is also observed that there is good demand for housing activity among tribals.

3. MANUFACTURING PROCESS

Cement concrete blocks can be solid (dense) or hollow. Besides different sizes and designs can be given to the blocks. The blocks are made in the sizes of 12x8x4"; 12x8x3"; 12x8x6", etc. Firstly cement, stone chips, sand, etc are mixed in the ratio of 1:6 or 1:12. This mixture is put in vibrator machine. This is then poured into the desired size mould. After 24 hours of drying, the blocks are put in water tank for curing. The process of curing continues for two to three weeks to give the blocks compression strength. The blocks are used in construction process after drying.

4. PRODUCTION CAPACITY PER ANNUM

Capacity

230000 blocks

Selling Price

Rs.

6 per block

5. PROJECT COST/CAPITAL INVESTMENT

S.No	Description	Amount Rs.
1	Fixed Capital	158000
2	Working Capital for 1 month(s)	107000
3	Preliminary & Preoperative Expns	5000
	Total Project Cost	270000

6. MEANS OF FINANCE

S.No	Description	%age	Amount Rs.
1	Promoter Contribution	15%	40500
2	Subsidy/Soft Loan	20%	54000
3	Term Loan	65%	175500
	Total		270000

7. FINANCIAL ASPECTS

A. FIXED CAPITAL

i. Land and Buildings

Own

Work shed of 500 sq ft, water curing tanks, etc Rs. 100000

ii. Machinery and Equipment

S.No	Description	Qty.	Rate	Amount Rs.
1	Semi-automatic concrete block making m/c with motor and vibrator	1	25000	25000
2	Moulds - 4" & 6" wide	2	10000	20000
3	Wooden logs	LS		8000
4	Other tools	LS		5000
	Total			58000

B. WORKING CAPITAL

i. Salaries & Wages (per month)

S.No	Description	Nos.	Sal/mon.	Amount Rs.
1	Supervisor/Entrepreneur	1	3000	3000
2	Skilled workers	1	2500	2500
3	Semi-skilled workers	1	2000	2000
4	Unskilled workers	5	1500	7500
	Total			15000

ii. Raw Material (per month)

S.No	Description	Unit	Qty.	Rate	Amount Rs.
1	Cement	bags	500	120	60000
2	Stone chips - 0.5"	mt ft	2700	4	10800
3	Sand	mt ft	2700	3	8100
4	Stone dust	kgs	2700	3	8100
	Total				87000

iii. Utilities (per month)

S.No	Description	Unit	Amount Rs.
1	Power	LS	1000
2	Water	LS	1000
	Total		2000

iv. Other Expenses (per month)

S.No	Description	Amount Rs.
1	Postage, Telephones & Stationery Expenses	300
2	Transportation & Conveyance Expenses	2000
3	Consumable Stores	200
4	Reparis and Maintenance Expenses	300
5	Miscellaneous Expenses	200
	Total	3000

v. Total Working Capital (per month)

S.No	Description	Amount Rs.
1	Salaries and Wages	15000
2	Raw Material	87000
3	Utilities	2000
4	Other Expenses	3000
	Total	107000

8. COST OF PRODUCTION (PER ANNUM)

S.No	Description	Amount Rs.
1	Total Working Capital	1284000
2	Depreciation @ 15%	8700
3	Interest on term loan @ 12%	21060
	Total	1313760

9. TURNOVER (PER YEAR)

S.No	Description	Unit	Qty.	Rate Rs.	Amount Rs.
1		blocks	230000	6	1380000
	Total				1380000

10 FIXED COST (PER YEAR)

S.No	Description	Amount Rs.
1	Depreciation	8700
2	Interest	21060
3	Salaries & Wages @ 40%	72000
4	Other Expenses incl. Utilities @ 40%	24000
	Total	125760

11. PROFIT ANALYSIS & RATIOS

1	Net Profit	Rs.	66240
2	Percentage of Profit on Sales		5%
3	Percentage of Return on Investment		25%
4	Break Even Point		66%