

Cement Jalli

Product Code (based on ASICC – 2000)	ASICC - 94431 NIC2004 - 26959
Production Capacity: Qty.	Qty .- 300000 sq. ft. Value –Rs. 6,30,000/-
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Introduction

Cement jallies have occupied an important role in the building constructions. Cement jallies are pierced panels with a thickness of not less than 2.5 cm used in construction of houses, building, etc. as partition panels in the walls and ventilators.

Market

The demand for cement jallies increases correspondingly with the increase of building construction activity which is fast growing in the country. Apart from low cost, other contributing factors to their demand are fascinating designs and functional qualities in the market. Though the consumption of cement jalli in Bihar state is about 1,00,00,000 sq.ft in a year, there are around fifty to sixty units running to meet the requirements. The gap in demand & supply is met by the product transported from other adjoining states like Uttar Pradesh, West Bengal and Jharkhand. There is a good scope to develop MSE units in this line of manufacture for local consumption.

Basis and Presumption

1. It may be assumed that the unit will be working on single shift basis for 300 days in a year with a production capacity of 3,00,000 sq ft cement jallies per annum.
2. The basis for calculation of production capacity is on single shift basis, working of 25 days per month on 75% efficiency. The time required for achieving envisaged capacity utilization is assumed as one year.
3. BEP for the scheme has been calculated on full capacity utilization.
4. Rate of interest has been taken as 16% on an average. This however, is likely to vary depending upon the financial outlay and location of the unit.
5. The cost of machinery & equipment as indicated in the scheme are approximate to those ruling at the time of preparation of the scheme. The entrepreneur may check up the exact price for specific make and model of the machine selected.

6. Non-refundable deposits, cost of preparation of projec profile, etc. may be considered under pre operative expenses.
7. The provisions may in other respects vice-versa raw materials, labour wages, utilities, overheads, etc. are drawn on the basis of standard variation and output. The cost indicated against each are approximate based on local market conditions and observation. The entrepreneur may find out the exact cost from the concerned sources.

Implementation Schedule

Project implementation Schedule

The major activities in the implementation of the project have been listed and the estimated average time for implementation of the project is indicated for 12 months.

Sl. No.	Activity	Period in months
1	Preparation of Project Report	1
2	Registration and other formalities	1
3	Sanction of loan by financial institution	3
4	Plant and machinery	
a)	Placement of order	1
b)	Procurement	2
c)	Power connections, electrification	2
d)	Installation, errection of machinery test equipment	2
5	Procurement of raw materials	2
6	Recruitment of technical personnel	2
7	Trial production	11

8	Commercial production	12
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Process of Manufacture

Though not much advanced technology is employed in the manufacturing of cement jallies, the techniques in designing and shaping have developed since these items find use in the multi-storeyed building as ventilators and partittion panels in walls.

The process of manufacturing of cement jallies is simple, as the technical aspects involved are very less and do not require any sofisticated machineries. One concrete hand mixture (local made) and iron or wooden moulds are required for the manufacture of cement jallies.

The moulds are lubricated with kerosene oil and kept ready for moulding. The cement and sand in proper ratio (i.e. 1:3) with proportionate water is mixed to make concrete mixer. The moulds are then filled with the concrete mixer duly providing reinforcement with M S rods and wires at suitable depth. The excess material spread over the mould is removed and the surface is smoothed with the help of a trowel. The jallies in different shapes and designs are then removed about 24 hours. These jallies are then immersed in water for 14 days for curing in order to develop strength and make more durable.

After curing the jallies are dried and stored for marketing

Inspection and Quality Control

To ensure the proper quality as per the customer requirement, the unit should have minimum testing facilities for mechanical strength analysis.

Production Capacity Per Annum

It is envisaged that the unit can achieve production capacity of 300000 sq ft cement jallies per annum valued at Rs. 63,00,000/-

Financial Aspects

1. Fixed Capital :

(a) Land & Building:

S. No.	Description	Amount (Rs.)
01.	Land – 400 Sq. mtrs.	OWN
02.	Built-up area office & store 50 Sq. mtrs @ Rs.4000/- per sq. mtr.	2,00,000/-
03.	Workshed – 100 Sq. mtrs. @ Rs.2500/- per sq. mtr.	2,50,000/-
Total		4,50,000/-

Machinery and Equipment :

S. No.	Description	Qty	Rate (Rs.)	Amount (Rs.)
01.	Moulds/frames (iron) - Ind.	60	650/-	39,000/-
02.	Wooden planks – Ind	60	50/-	3,000/-
03.	Concrete hand mixer – Ind	01	20,000/-	20,000/-
04.	Vibrator with 1 Hp motor and starter	01	18,000/-	18,000/-
05.	curing tank 10'x5'x3'	02	10,000/-	20,000/-
06.	Misc tools & equipments	LS	LS	10,000/-
07.	Office Furniture & Equipments	LS	LS	20,000/-
08.	Electrification & instllation	LS	LS	5,000/-
09.	Pollution control equipment	LS	LS	5,000/-
Total				1,40,000/-

Total Fixed Capital (a+b) = Rs. 5,90,000/-

Working Capital Per Month :

a. Raw Material Per Month :

S. No.	Description	Qty	Rate (Rs.)	Amount (Rs.)
01.	Portland cement	24 Mt.	6,000/-	1,44,000/-
02.	Sand	3000 cu.ft.	13/-	39,000/-
03.	M S rod & wire	04 Mt.	44,000/-	1,76,000/-
Total				3,59,000/-

b. Salaries & Wages Per Month :

S. No.	Designation	No.	Salary (Rs.)	Total (Rs.)
01.	Manager & Accountant	01	6,500/-	6,500/-
02.	Typist cum clerk/store keeper	01	5,000/-	5,000/-
03.	Skilled worker	04	4,000/-	16,000/-
04.	Unskilled worker	08	3,000/-	24,000/-
05.	Peon/watchman	01	3,000/-	3,000/-
Total				54,500/-
Perquisites @ 15%				8,175/-
Total				62,675/-

c. Utilities Per Month :

S. No.	Description	Qty.	Rate	Amount (Rs.)
01.	Power	500 KW	Rs.5/- per KW	2,500/-
02.	Water	-	-	1,500/-
Total				4,000/-

d. Other Expenses Per Month :

S. No.	Description	Qty.	Rat E	Amount (Rs.)
01.	Advt. & Publicity	-	-	2,000/-
02.	Insurnance	-	-	2,500/-
03.	Misc.expenses like telephone	-	-	1,500/-
04.	Oil &Lubricant consumable	-	-	1,500/-
05.	Postage & stationery	-	-	1,000/-
06.	Repair & replacement	-	-	1,000/-
07.	Transport charges	-	-	2,000/-
Total				11,500/-

Recurring Expenditure Per Month (Rs.):

$$\begin{aligned} &= 3,59,000 + 62,675 + 4,000 + 11,500 \\ &= \text{Rs.}4,37,175/- \end{aligned}$$

Working Capital for 3 Months

$$\begin{aligned} &= \text{Rs.} 4,37,175/- \times 3 \\ &= \text{Rs.} 13,11,525/- \end{aligned}$$

3. Total Capital Investment :

	Rs.
Fixed Capital	5,90,000/-
Working Capital for 3 Months	13,11,525/-
Total	19,01,525/-
Say	19,00,000/-

I. Financial Analysis

a. Cost of Production Per Annum :

S. No.	Description	Amount (Rs.)
01.	Depreciation on building 5%	23,500/-
02.	Depreciation on furniture @ 20%	5,000/-
03.	Depreciation on machinery @ 10%	4,300/-
04.	Depreciation on moulds, tools & equipments @ 25%	13,000/-
05.	Recurring expenditure	52,46,100/-
06.	Interest on capital investment @ 16 %	3,04,000/-
Total		55,95,900/-
OR Say		55,96,000/-

b. Turn Over (Per Annum) :

It is envisaged that the unit can achieve production capacity of 300000 sq ft cement jallies per annum valued at Rs. 63,00,000/-

Item	Quantity	Rate (Rs.)	Value (Rs.)
Cement Jallies (Sq. Ft.)	3,00,000	@ 21/-	63,00,000/-

c. Profit Per Annum :

Sales Per annum	63,00,000/-
Cost of Production per annum	55,96,000/-
Profit	7,04,000/-

d Profitability Analysis

	=	$\frac{\text{Profit/annum} \times 100}{\text{Sales/annum}}$
	=	$\frac{7,04,000 \times 100}{63,00,000}$
	=	11.17%

e Rate of Return

	=	$\frac{\text{Profit/annum} \times 100}{\text{Total Capital investment}}$
	=	$\frac{7,04,000 * 100}{19,00,000}$
	=	37.05%

f Break Even Point :

i. Fixed cost per annum :

S. No.	Description	Amount (Rs.)
01.	Depreciation	45,800/-
02.	Interest on investment	3,04,000/-
03.	Insurance	30,000/-
04.	40% of salary and wages	3,00,840/-
05.	40% of other expenses & Utilities excluding insurance	43,200/-
Total		7,23,840/-

Profit per annum = Rs. 7,04,000

$$\begin{aligned} \text{Break Even Point} &= \frac{\text{Fixed Cost/annum} * 100}{\text{Fixed cost/annum} + \text{profit/annum}} \\ &= \frac{7,23,840 * 100}{7,23,840 + 7,04,000} \\ &= 50.69\% \end{aligned}$$

J. Name & Address of Suppliers of Machineries & Raw Materials

Suppliers of Machineries

01. M/s Reema Industrial Corporation Industrial Estate Bhagalpur (Bihar)

02. M/s Baidya Nath Roy
36/6, Ramkrshna Samadhi
Road, Kolkata – 700 054 (W.
Bengal)

The moulds / frames, etc. can be made locally.

Suppliers of Raw Materials

All the raw materials for cement jallies are available in the open market.

For further information please contact
Information Manager
TIMEIS Project
E-mail: timeis@ficci.com