

1. INTRODUCTION:

Jali is constructed with different materials like concrete, lightweight concrete, fly ash etc. Cement jallies have occupied an important role in the building affordable constructions. Cement jallies are pierced panels with a thickness of not less than 2.5 cm. Very often cement Jali is a better substitute for a window. It lets in general subdued light. It also deals with ventilation but prevents rain from entering. It is secured from thieves or animals. Cement Jali of different designs and shapes are made according to needs. It is cheaper than wood or steel jail. There is good demand in rural areas.

2. PRODUCT & ITS APPLICATION:

Cement jalis are used even in city, especially in public buildings like schools, institutions or government offices. Cement jali can be seen in parapet jali, stair railing jali, jali screens, and ventilator. Cement jali when used as boundary walls for gardens, it regulates the flow of light and air and also prevents unwanted animals and peoples to enter the garden. It is important to have attractive designs and shapes to make consumer friendly.

3. MARKET POTENTIAL:

The demand for cement jallies increases correspondingly with the increase in building construction activity. It 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. The consumption of cement jali in Gujarat is mainly in rural areas. There are about fifty units making jali in Gujarat to meet the requirements. There is a good scope to develop MSME units in this line of manufacture for local consumption. Low cost and affordable housing schemes of new Govt. will boost the demand for building materials. Also, new infra projects will create demand for such product in near future.

4. RAW MATERIAL REQUIREMENTS:

- Portland cement
- Sand
- M S rod & wire

5. MANUFACTURING PROCESS:

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 multistoried building as ventilators and partition 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 sophisticated 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 in about 24 hours. These jallies are then immersed in water for 14 days for curing in order to develop strength and make more durable.

6. PLANT & MACHINERY:

- Moulds/frames (iron)
- Wooden planks
- Concrete hand mixer
- Vibrator with 1 HP motor and starter
- Curing tank 10'x5'x3'
- Misc. tools & equipments
- Office Furniture & Equipments
- Electrification & installation
- Pollution control equipment

7. FINANCIALS:

The total project cost is Rs.3.5 lakhs. Initial annual turnover shall be Rs.12 lakhs and profit shall be Rs.3 lakhs. The break-even point will be 45%.

8. SOURCES OF INFORMATION:

- i) Ganesh Cement Jali Udyog
Plot Number A 5, Ram Marg, Near Akshay Paatra Mahal Yojna,
Jagat Pura, Jaipur - 302017, Rajasthan, India
- ii) Vijayata construction material
Shop no. 15, Ground floor, Jeevan dharma co. operative housing society,
Thane east, Thane – 400603, Maharashtra, India
- iii) MSME development institute
4th floor, Harsiddh chambers, Ashram road,
Ahmedabad – 380014, Gujarat, India
- iv) Cement manufacturers association, Mumbai
Express Building, 1st Floor,
Indian Merchant's Chamber Marg,
Church Gate, Mumbai-400020, Maharashtra, India