DOME CONSTRUCTION

BASICS FOR DOMES

Variety of Shapes

- Segmental
- Hemispherical
- Pendentive
- Octagonal
- Square
- Round

Suitability of Domes

Domes are suitable in:
- Roofs: for waterproofing purposes
- Bases: for stability
- Sky domes: for observatories

Typical Square Dome for Village House

- Dome on square plan
- Suitable for small buildings

Building a Circular Dome

1. Setting up the Compass
2. Detail of a Compass
3. Soaking the Block and Laying the Glue
4. Stick the Block on the Masonry
5. Adjust the Block
6. Wedge the Joints
7. Laying the Last Block
8. Starting a New Ring

Building a Square Dome

1. Setting up the Template
2. Soaking the Block
3. Laying the Glue
4. Stick the Block on the Masonry
5. Wedge the Joints
6. Laying the Keystone
7. Adjust the length of the last block
8. Starting a New Ring

For further information on dome construction, please contact:

UNITED NATIONS CENTRE FOR HUMAN SETTLEMENTS (UNCHS - HABITAT)
PO Box 20020, Nairobi, KENYA
Phone: (254) 22324
Fax: (254) 22385
E-mail: hab@un.org

AUROVILLE BUILDING CENTRE (AVBC / EARTH UNIT)
Auroshilaam, Auroville - 605 101
Tamil Nadu, INDIA
Phone: +91 (0)413-622057
Fax: (86) 224265
Email: csr@auroville.org.in

FOR HUMAN SETTLEMENTS

BUILDING A CIRCULAR DOME

BUILDING A SQUARE DOME

Application of Domes:
- Low energy buildings
- Durable and long-lasting
- Can be used in various climates

 Timberaving:
- The dome is a beautiful design and a valuable asset.

 Variety of Places and Shapes:
- Domes can be circular, square, rectangular, round, etc.

 Stability Study:
- The dome is sturdy and can withstand strong winds.

 Need of Skilled Masons:
- Domes require skilled masons to build.

 Need of Good Quality Materials:
- Domes require high-quality materials to build.