

# JOURNAL

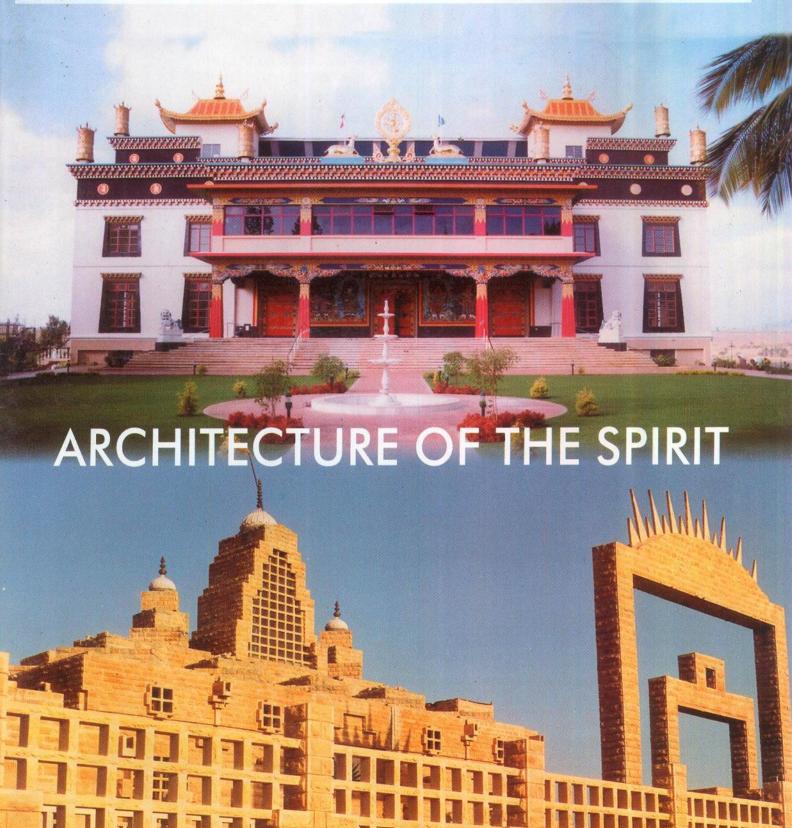
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## Radhakrishan Sarovar Temple at Tinwari

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South East View

Background

Geeta Dham is an institution formed for dissemination of the teachings of the Geeta. Founded by His Holiness Shri Hari Har ji Maharaj, it had been conceived by him as the culminating project of his international organisation, Universal Spiritual Geeta Research Centre, devoted to spreading the teachings of the Geeta through over 650 chapters the world over.

#### Location

Situated in Tinwari [approx. 60 kms North of Jodhpur] the 90 acre site of Geeta Dham is in the midst of large agricultural farms. Being on the fringe of the desert, the climate of the region is characterised by harsh scorching sun and hot winds through major part of the year.

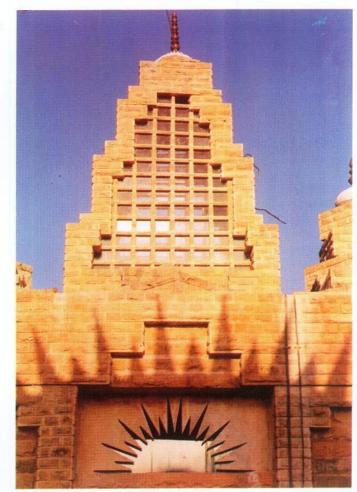
#### Layout

The Radhakrishan Sarovar Temple meant to be a prayer hall is set in the site as a focus of group of (proposed) buildings of sacerdotal nature.

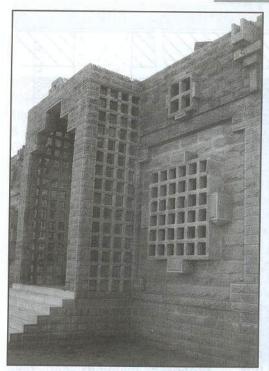
The site of the prayer hall is the centre of a concentric layout of belts of gardens and a pond. From the first belt of garden to the next are 4 connecting bridges spanning the width of the pond and entered upon by free standing gateways on all the 4 cardinal directions, crowned by a symbolic sun carved out of stone.

#### Climatic Response

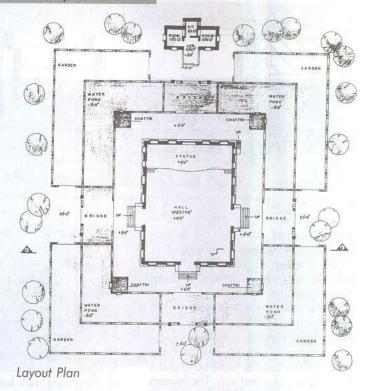
In the original brief, it was to be a hall where air conditioning and air cooling would not be desirable. It had to be designed so as to prevent direct solar insolation and at the same time expiate hot air generated by the gathering or people inside. This called for construction of a hall enveloped by walls and roof so designed that they allow minimum solar penetration. While there are many traditional methods available to insulate a roof (the morram



Shikhar View







available in Tinwari is famous for its insulating properties when used in terracing) it were the walls that called for thoughtful designing.

#### Wall Detail

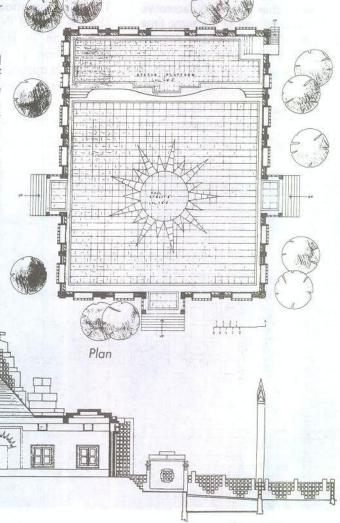
Section

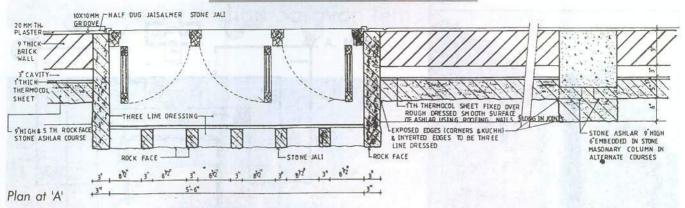
The construction of the external walls employs a newly devised technique in the use of stone whereby the load of the roof is transferred on the columns and walls are "cavitized". Stone slabs, which are conventionally used as roofing material, form the outer layer of the cavity wall while the inner layer is made of conventional brick masonry. The slabs have been used in their most natural form, rough and gently dressed.

The external is made of 6" thick x 9" high Jodhpur ashlar sandstone resting on longer edge, one on top of the other to form a 6" thick wall, back lined with thermocol. Each 9" high course is fastened at the ends by either masonary columns or deep ashlar jambs of windows.

After fourteen courses of ashlar slabs the cavity continues in conventional 6" coursed stone masonary to match the GL to PL masonry.

The concept of "Serdep" of Saudi Arabia (introducing air into a building through a shaft from a wind catcher passing through moist under-earth tunnel) is to be used to replace hot air tapped in the cavity.





#### Sun Control

External fenestration is minimized to avoid direct solar gain. The sizes of external windows are further cut down by louvering, which also makes each opening deep enough to elimate the need for sun shades / cantilivers.

A window of 6'x6' is set in the middle of the cavity wall panel. These windows are deep & louvered to check penetration of direct sun. The louvers are made of strips ("LIRI") of rock faced front and side dressed stones. The "Jali" thus achieved is both decorative and functional and at the same time cheaper than a traditional carved, decorative stone "Jali".

Set into the upper part of the cavity is a stone louvered ventilator in each panel which serves as an exhaust for the Hall & the cavity alternately.

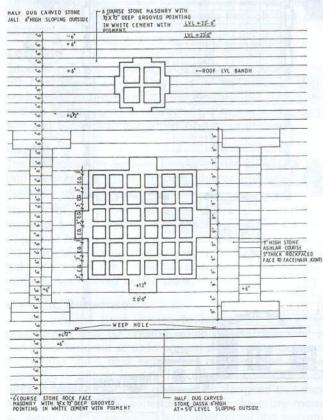
The middle panel of the wall on the west, forming the backdrop of the statues of RADHAKRISHAN is of stone cut "Jali" with its void space silhouetting the shape of sun, lending a kind of a halo to the statues.

The tall "shikhar" is so designed and its opening so oriented, that the rays of the rising sun bathe the statues under it.

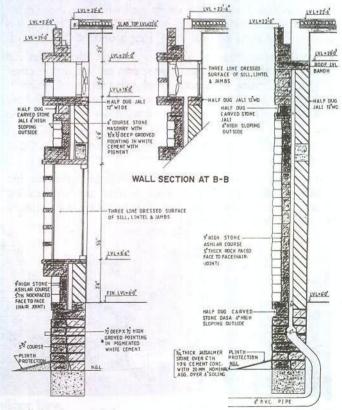
### The Composition

The elevation of this building is not its facade in isolation. It is a composition of the building set between its appurtenant structures like the gateways, parapets of gardens and pond, the "chattris" at the four corners and the "shikhars" at top. There are free standing identical gateways in the four cardinal directions. The shape of the internal frame of this concentric gateway is a repetitive feature to be used in the entire institutional complex as an "identifying" element of over 30 proposed buildings and their connections. The external frame is a simple trabeated structure crowned with a symbolic sun carved out of dressed stone.

In composition, the concentric frames of the gateway profile out a void in between and the void so obtained can be said to be another gateway in itself.



Part Elevation at 'A'



Wall Section at A-A