Between Walls
Community medical center and school, Tatiba Baraibura, Jharkhand, India

Main author
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Project data
Context: Architecture, building and civil engineering
Client: Stem Minerals LLP
Background: Private commission
Planned start: February 2014

Summary and appraisal by the jury
The community center in Tatiba Baraibura is comprised of a residential school for 400 students, vocational training program and medical center for 14 villages in the West Singhbhum district. The project is financed by a mining company as part of its social responsibility program. Local rough laterite stone is used as the main building material of the four parallel walls that comprise the building’s load bearing structure. A light roof with substantial overhang made of industrialized steel ensures shading and natural ventilation. The low cost structure combines local materials and traditional craftsmanship with modern technology.

The jury was highly impressed by the elegance of the proposed structure – a building of unassuming poetic expression. Straightforward means are put to work to form a highly adaptable system of walls, openings, access routes, open courts and indoor as well as outdoor spaces. These elements are all assembled according to the rules of time-honored architectural principles – a building both traditional in the way it is made and modern in its appearance. Notwithstanding the design’s aesthetic quality, the project adheres to most criteria elucidated in the “target issues” for sustainable construction, merging economic, social, contextual, and environmental aspects into a simple yet sophisticated building.

Sustainability concept
Four thick parallel walls, built using locally-sourced laterite stone give the space the building form. Aligned along the slope of the terrain, these walls define the structure and shape of the complex. The footprint is limited to 45 x 135 meters, leaving most of the site in its natural condition.

The building is oriented along the north-south axis and the roof has a substantial overhang in order to reduce the amount of sunlight received by the walls. The laterite walls also serve as the primary structure for defining the movement routes, open courts, and access to the complex.

The linear volumes between the parallel walls house various programmatic requirements like classrooms, student dormitories and general facilities. The light roofs float above the parallel walls, allowing cool air to flow freely between the roof and the ceiling, leaving walls with apertures as a possible façade. Controlled views of the landscape through staggered apertures are a feature of the plan. The interior quality of the complex is shaded, cool and airy, creating a shadowed oasis from the climate outside. The proposal deploys low-cost construction making the most of local materials and skills, using the potential of the local community while adapting technology from the industrialized world in a simple way.

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Further authors
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