

# STEEL STRUCTURES & METAL BUILDINGS

**STRUCTURAL  
STEEL  
CONSTRUCTION SUMMIT**

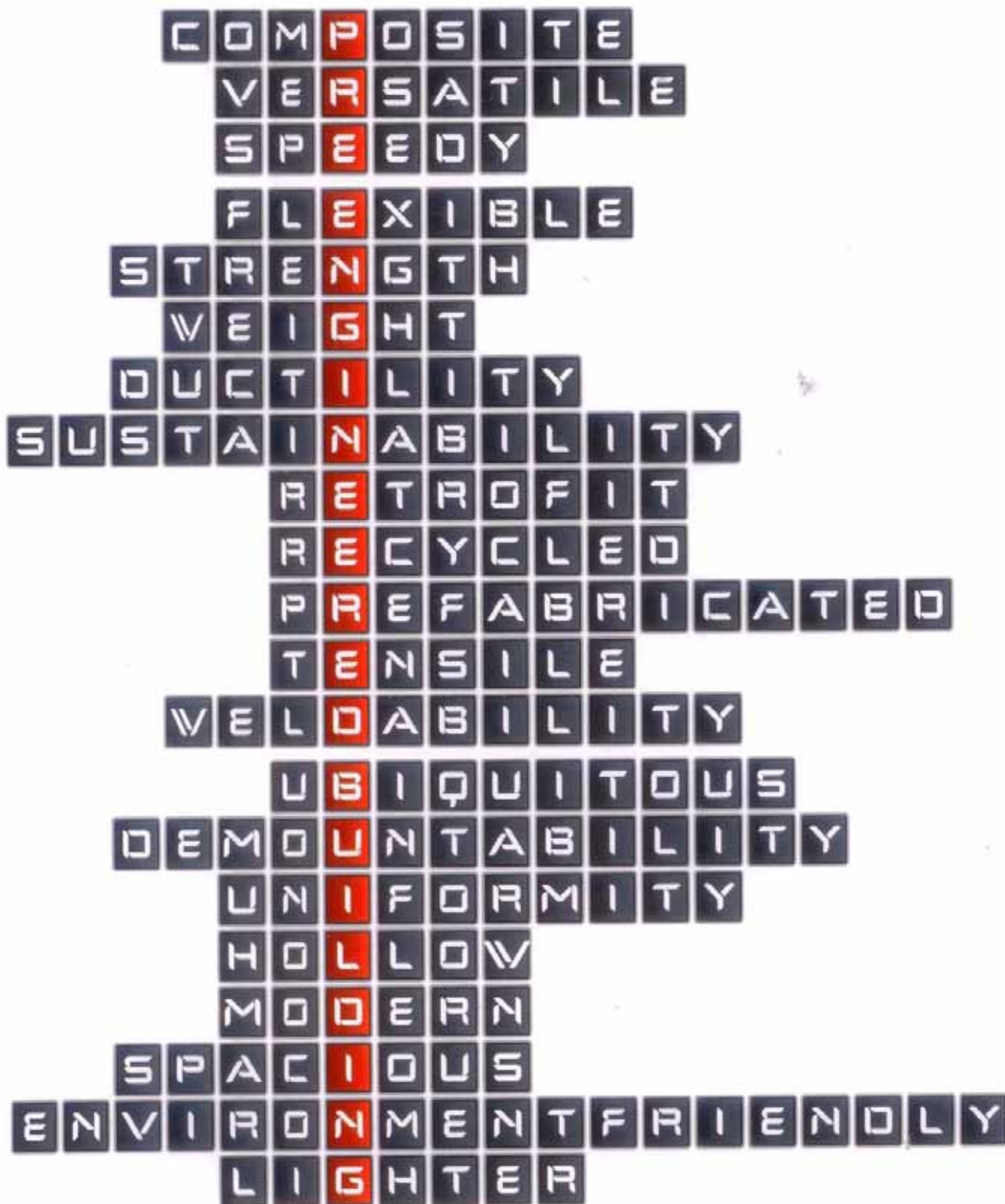
a new era in steel construction

Celebrating



STRUCTURAL  
STEEL DAY

MUMBAI



STEEL IS THE NAME OF THE GAME™



# TIMES SQUARE MALL, NAYA RAIPUR



**ARCHITECT GURPREET SHAH**  
Principal, Creative Group

We imagined designing an environment full of greenery, retail shops and recreational activities; an environment that could act as an enclave of connection and welcome people inside. It is a mall to be experienced to be understood



breaking away from the age-old philosophy and concept

**T**imes Square Shopping Mall is a design project for an entire micro-urbanism. Spreading across an area of 11,000 sq. mtrs., the identities of mall, both, as commercial space and sustainable complex, are understood to be symbols projected onto administrative capital of the State of Chhattisgarh representing Naya Raipur as India's fourth prosperous and planned smart city. A mall, being a commercial building, requires a critical approach towards positioning, zoning and magnetic aspects. After a deep insight towards these critical factors, Creative Group took forward the planning and

design of a mall with a sustainable and charismatic approach which pleases not just the client, but, also the visitor. It is aptly placed around the administrative buildings in the vicinity serving as a landmark and a turning point for the otherwise structured building envelopes. As Raipur is still growing, affordability is still a criteria. Thus, the ideology behind this commercial complex was to apply basic design principles like mutual shading and building orientation, so as to conceive a sustainable mall with minimum energy consumption.

Client  
Avinash Group

Architect  
Creative Group

Structural Consultant  
Jaitley Associates

Steel Suppliers  
Tata Steel Ltd., SAIL, RINL, TISCO

### Creating the Design

Breaking away from the age-old philosophy and concept of a mall to be a conventional glass building with no play of forms, Ar. Gurpreet Shah, Principal Architect, Creative Group accommodates an abstract use of jaali work as an elevation feature with a dynamic built form where the building facade changes at every viewing angle. The concept is based on an emerging curve which rises from the ground and showcases the aspirations of a development of a new city Naya Raipur. Hoardings solve purpose of acting as a second sun screen apart from being a decorative element in the building; imbedded in the niches of metal jaalis. The helical form of the building emerges from the ground floor, as if originating from the surrounding landscape.

The design team worked across scales to doubly awe visitors with vast spaces and welcome them with measures of comfort. In following, coherence and hierarchy were critical to the mall's planning. The architects have delivered a highly sustainable and viable contemporary built-form which is enhanced by their capability to engage themselves right from the initial phase of the project.

The design creates open spaces and stepped terraces with the view of providing maximum commercial viability. The stepped terraces add extra area to each floor, thereby increasing the saleable areas and acting as recreational spaces. At smaller scales, architectural details provide a visual dynamism that extends through each of the mall's spaces. It is interwoven with all characteristics of an iconic marvel which are responsive to its environment.

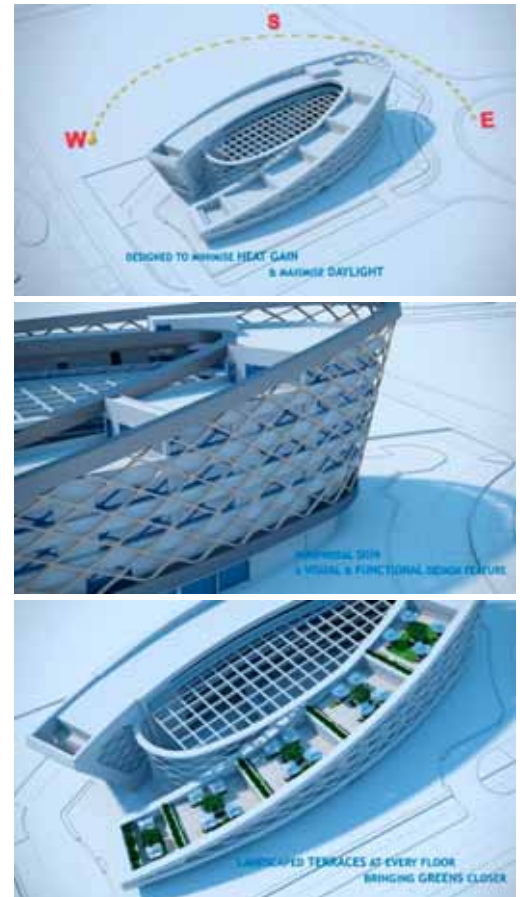
### Sustainable Creations

Vastu Considerations have played a very important role in the design process. The rising and dynamic form of the mall places its highest point on the south, adhering to Vastu analysis. The placements of various functions within the commercial building have also been planned as per the client's vastu requirements. Moreover, the client's vision of a mall which provides value for money with functional aspects being catered to is translated into the dimensions of physical space with a unique design approach. Times Square imparts an entire new definition to architecture by using natural air and avoiding the use of artificial cooling systems.

Shaded courtyards in the centre create recreational relaxing spaces. Wind tunnels are created in the central courtyard for the flow of air and the kiosks are placed around the courtyard for the ease of consumers. Food and beverages are provided on the ground floor for convenience. The highest point of the building being at the south-west protects the building from harsh summer sun. The lake & the central park, right across the mall further enhances the cooling effect.

### Making Steel Work

The design team's past experiences with projects proved that it was relatively easier to use steel than any other material, because of its high tolerance and flexibility. Since it is a flexible material, it was used on the facade to create a three dimensional jaali structure, therefore, enabling the designers to achieve the true profile of the commercial complex. In this project, steel was used wherever a large span was required - namely the atrium frame and the



facade. The building slabs have been made of concrete, but, structural elements like the pergola and the three dimensional jaalis, thus, giving us a unique opportunity to integrate the advertising billboards in the building.

### Structurally Sound

The building has been synchronized in three dimensions to get the dynamic profile. It has thus, been modulated in Revit to achieve the correct nodal points and geometry. The design team also inculcated the a maximum cantilever of 7.5 m in the complex. The building rises and falls, as per the solar movement, to achieve maximum daylight and minimum heat.

In a city where infrastructure facilities are already accredited as "smart city facilities", the team of architects takes a very interactive and professional approach in contributing towards the smart city development of Naya Raipur. The architects feel that it is important to celebrate what makes these buildings a step ahead in the ever talked about "smart city developments." Creative Group projects Times Square Mall as a step towards responsive architecture and design for the next- gen catering to all aspects of sustainable and affordable design with economic viability and commercial feasibility. ■



Steel Sections  
YST 250 grade of steel (tubular/built up section) for steel jaali work

Built-up Area  
11,000 sq. mtrs.

Status  
Ongoing