

NatGeo films Kolkata highrise for mega-structures series - Times of India

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KOLKATA: A super-premium residential project that is currently under-construction in Kolkata will feature in next season's popular National Geographic series Superstructures that handpicks engineering marvels around the world and showcases the art and science that goes into creating it. Some of the mega-structures that have been featured on NatGeo include the Burj Al Arab and Palm Island in Dubai, London Olympic Stadium, Sheikh Zayed Grand Mosque in Abu Dhabi, Pearl River Tower in China's Guangzhou, Millau Bridge in southern France, Golden Gate Bridge in San Francisco and Taj Mahal.

What propelled the Atmosphere, a development by Rahul Saraf-led Forum Projects adjoining Science City off EM Bypass, into the elite list is not the scale of the twin towers but a 100-metre wide, four-level club deck that straddles them at a height of 100 metre above the ground.

The massive 2,350-tonne cloud-shaped steel structure is inspired in part from the famous Bean installation in Chicago and Singapore's Marina Bay Sands. When completed, the deck is expected to weigh 7,500 tonne. Designed by architect couple Peng Beng and Belinda Huang of Arc Studio, Singapore, the structural design is done by Hossein Rezai Jorabi of Web Structures, Singapore.

The NatGeo team decided to feature Atmosphere towards last year end and have been at the project site since January 2015. "We have placed a static camera at the site to capture the deck's construction. Since all the fabrication happened on site, everything is on tape," a crew member said. This is the team's third round of shoot. On Wednesday, the NatGeo team used multiple cameras filmed the lift-up of the 580 tonne steel skeleton in a 10-hour operation that began at 7am.

"For a residential structure to be called a Superstructure is truly saying a lot about its grandeur and magnificence. The Atmosphere is a new architectural icon in India and a great complement to our Superstructure series," said Fox International Channels AVP (sales and partnerships) Karan Tandon.

For the next 20 days, the deck will hang by the strandjack cables as engineers and technicians work round-the-clock to connect it to the steel trusses weighing 600 tonne each that is already in place atop the towers. Thereafter, the deck will be carefully lowered atop four square Eradiuake bearings of 2.4-2.8 metre, the largest ever to be made. Costing around Rs 15 crore, the seismic isolation bearings were imported from US. Some 5,000 pieces of steel are fitted perfectly into place by 75,000 steel nuts and bolts.

"The bearings are the most critical component in the development comprising three towers. Two of them are vertical residential blocks. And one is a horizontal club that lies horizontally. The deck cannot be fixed rigidly to the two towers at either end. The towers need to move independently during earthquakes. The bearings will allow free horizontal and vertical movement. Post a tremor, the deck will revert to its original position," explained Saraf.

After the bridge is set, four concrete floors will be cast to accommodate the 55,000 sq ft club suspended 400