

## STRUTTURA

- A Civil Design Competition

### Task

Fluxus brings you a chance to design a tall and stable tower using drawing sheet and some adhesives. Use your own techniques and challenge the world to prove your mettle as a successful engineer.

### Game Procedure

- 1) Participants need to design a tower with the material provided to them.
- 2) Participants will be given 3 hours to complete their tower.
- 3) The tower can be of any shape.
- 4) The tower should not be stuck to the surface.
- 5) The tower should be able to stand on the ground without any support.
- 6) The points will be awarded based on height and stability of the tower.

### Material Provided

- 1) A chart paper (A1 size)
- 2) Cello tape
- 3) Scissors
- 4) Fevicol

\*Participants cannot use any material other than that provided to them by the organisers. (Miscellaneous basic stationery like pencils, erasers, etc. should be carried by the participants.)

## **Tower Constraints:**

- 1) Tower should have a horizontal platform ( $\geq 5 \times 5$  sq.cm) on its “peak”.
- 2) A block of  $5 \times 5$  cm (base surface) weighing around 40–50 gm. will be placed on that platform and tower should hold block without falling it.

These two constraints must be fulfilled, otherwise team will be disqualified.

## **Stability Testing**

The stability of tower will be tested by giving a push on upper part of tower by a pendulum of certain weight.

**NOTE:** The tower will be hit by pendulum without block. Block is just to ensure that the tower can sustain the weight of it.

## **General Rules**

- 1) Organizers’ decision shall be treated as final and binding on all. The organizers reserve the right to change any or all of the above rules as they deem fit.
- 2) Change in rules, if any, will be highlighted on the website and notified to the registered participants.

- 3) Organizers reserve the right to disqualify any team indulging in misbehavior or violating any rules. In case of any disputes/discrepancies, the organizer's decision will be final and binding.
- 4) Note that at any point of time, the latest information will be that which is on the website. The information provided in the pdf downloaded earlier may not be the latest. However, registered participants will be informed through mail about any such change.

## Judging Criteria

- 1) For height the points will be given by  $PH = 0.75 \times \text{Height (in cm)}$
- 2) For stability test tower will be hit three times by pendulum such that the weight of bob will increase every time. If the tower stumbles against any bob, it will not be tested for higher weights. The weights of the various pendulum bobs would be disclosed at the time of event only. Points awarded for 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> ball will be 15, 25 and 35 respectively. Total points for stability =  $P_S$
- 3) The final score will be given by  $P = P_H + P_S$

\*The team with the highest score will be declared as winner. In case of a tie, the tower with greater height will be the winner.

## Eligibility

All students with a valid identity card from their respective educational institutions are eligible to participate.

## Team Specifications

A team can consist of maximum 3 members. Students from different educational institutes can form a team.

## Duration of Competition:

Team will have to complete their tower within 3 hours.

## Certificate Policy

- Certificate of Excellence will be awarded to the top 3 teams.
- Certificate of Participation will be given to all participating teams.
- Disqualified teams will not be considered for any certificates.

## Contact

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