

# WC Branch

## Cube Crushing Competition 2017

*The 2017 Annual Cube Competition continues the quest for the nearest crushing strength to a set target.*

This year's competition is proudly sponsored by PPC and BASF, who have generously sponsored the prize money divided equally between the undergraduate, post graduate and non-student or industry categories. The winning entry in each category (based on the strength of a single 100 mm cube specimen) will be calculated as follows:

**Closest to Target Strength of 9 MPa of the '24-hour drip-dried' cube specimen**

- » No entry fees are charged.
- » All cubes that are entered shall have a R5 coin showing tails embedded into the face of the cube.

More details regarding the competition as well as the entry form are given in the rest of this document.

*Proud Sponsors of the CSSA Western Cape Branch Concrete Competition*



### Competition Prizes:

The following *undergraduate student prizes* are on offer in 2017:

Highest score	R 1700
Runner up	R 900
Third Place	R 400

The following *post graduate student prizes* are on offer in 2017:

Highest score	R 1700
Runner up	R 900
Third Place	R 400

The following *non-student (industry) prizes* are on offer in 2017:

Highest score	R 1700
Runner up	R 900

### Prize Giving Function Information:

**Date:** Tuesday, 24<sup>th</sup> October 2017

**Time:** 17h30 to 19h30

**Venue:** Stellenbosch University

**Address:**

Stellenbosch University, Concrete Lab, Structural Division Civil Engineering Building, Banhoekweg, Stellenbosch.

**Programme:**

14h00-17h30	Crushing of cubes
17h30	Welcome and introduction
17h40	Crushing of final 10 cubes
18h00	Prize giving presentation
18h30	Social interaction with food and drinks

[» DOWNLOAD ENTRY FORM](#)

- » CASTING DATE: **No Restrictions**
- » ELECTRONIC SUBMISSION OF ENTRY FORM: **23<sup>rd</sup> of OCTOBER 2017(or sooner)**
- » CUBE SUBMISSION on or before **15h00 on MONDAY 23<sup>rd</sup> of OCTOBER 2017** at the concrete laboratory of Stellenbosch University, Concrete Lab, Structural Division Civil Engineering Building, Banhoekweg, Stellenbosch.
- » CRUSHING DATE: **TUESDAY 24<sup>th</sup> OCTOBER 2017**
- » PRICE-GIVING FUNCTION: **TUESDAY 24<sup>th</sup> OCTOBER 2017** at 17h30 at the concrete laboratory of Stellenbosch University, Concrete Lab, Structural Division Civil Engineering Building, Banhoekweg, Stellenbosch.
- » All entry forms must be submitted electronically by e-mail to **Riaan Combrinck** at [rcom@sun.ac.za](mailto:rcom@sun.ac.za) for enquiries  
Tel: 021 808 4946 (Riaan Combrinck, office) **NOTE THAT ONLY FULLY COMPLETED FORMS WILL BE ACCEPTED.**  
If the cubes cannot be matched to an entry form, the cubes will not be tested at all.
- » **Properly marked and categorized cube samples must be delivered on or before the 23<sup>rd</sup> of October 2017 at 15h00 to** Stellenbosch University, Concrete Lab, Structural Division Civil Engineering Building, Banhoekweg, Stellenbosch.  
The decision of the committee is final and no correspondence will be entered into.
- » The CSSA reserves the right to publish details of the winning cubes.
- » One 100 mm test cube is required and will be judged for the final result.
- » The formula used to establish the winning entry (based on the strength of a single 100 mm CUBE specimen) will be calculated as follows:
  - » ***Closest to Target Strength of 9.0 MPa of the '24-hour drip-dried' cube specimen (the absolute value of the difference between the target strength and the specimen strength)***
- » Any fibres may be used
- » Any aggregates may be used including synthetic aggregates produced locally or overseas.
- » There is no restriction on specimen mass.
- » Once received, cubes will be cured in water until 24 hours before testing, when they will be removed from the water and allowed to drip-dry indoors.
- » Any specimen that has deformed more than 10 mm, will be deemed to have failed regardless of whether the load resistance is increasing or decreasing.
- » Competitors will have to cast a R5 coin showing tails embedded in the strike off face of their cube sample. Cubes not complying with these requirements will be disqualified. Epoxies or similar bonding agents may NOT be used to affix the coin(s) to the cubes.
- » Only one cube per competitor (or team) will be tested. If more than one cube per competitor is received the committee alone will decide which cube must be discarded.
- » The committee will disqualify cubes that are not properly and clearly marked. Cubes will be stored in water from the day that the cube is received then removed and stored 'drying' from
  - » 24 hours prior to crushing. Cubes will be crushed in no specific order, one after each other, and at a time to suit the work load of the laboratory.
- » The Competition Committee may require any competitor or team to reproduce their cube under observation.
- » In the case where at least six entries per prize category are not entered, the judges reserve the right to combine categories for allocation of prizes. In such a case the total prize money will remain the same but the prize money will be distributed in equal portions between remaining categories.