

SCCT Technical Note No. 1

Number of Specimens for Determination of Mass per Metre and Tensile Tests under CS2:2012

Normally, under public works projects, only three specimens are provided for determination of both mass per metre and tensile properties (i.e. mass test and tensile test) of steel reinforcing bars, whereas in all Housing Department projects six specimens are required for the same tests. At SCCT Meeting No. 03/2015, Members agreed that as long as the samples are randomly selected and undisturbed after the mass test, they are still random samples for the tensile test. If the aforesaid condition is satisfied, three specimens* will be sufficient for determining the mass per metre and carrying out the tensile tests. This Note serves to clarify the number of specimens required for determination of mass per meter, tensile tests and, if needed, subsequent retests:

- (1) Take three specimens* and determine the mass per metre and carry out the tensile tests using the same specimens. If all specimens pass in both tests, then the batch from which they have been taken shall be deemed to comply with CS2:2012.
- (2) For each specimen failing to meet the requirement for mass per meter but complying with the requirements for tensile properties, select two additional specimens from the same batch for retests on the determination of mass per metre. If all additional specimens pass in the retests, then the batch from which they have been taken shall be deemed to comply with CS2:2012. If any additional specimen fails, the batch shall be deemed not to comply with CS2:2012.
- (3) For each specimen passing in the determination of the mass per metre but failing to meet the requirements for tensile properties, select two additional specimens from the same batch for tensile retests. If all additional specimens pass in the retests, then the batch from which they have been taken shall be deemed to comply with CS2:2012. If any additional specimen fails, the batch shall be deemed not to comply with CS2:2012.
- (4) For each specimen failing to meet the requirements for both mass per metre and tensile properties, select two additional specimens from the same batch for retests on the determination of mass per meter and tensile properties using the

same specimens. If all additional specimens pass in both retests, then the batch from which they have been taken shall be deemed to comply with CS2:2012. If any additional specimen fails in any retest, the batch shall be deemed not to comply with CS2:2012.

* More specimens may be required depending on the class and the size of batch according to Table 10 of CS2:2012.

[End]

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