

PROVA ORALE – TRACCIA 1

- 1) Il candidato descriva il metodo SONREB e indichi le normative di riferimento
- 2) Il candidato descriva le funzioni statistiche di base (media e deviazione standard) in MS Excel
- 3) Il candidato traduca dalla lingua inglese il seguente testo (tratto dalla norma EN 12504-2-2012)

Hold the hammer firmly in a position that allows the plunger to impact perpendicularly to the surface being tested. Gradually increase the pressure on the plunger until the hammer impacts. After impact, record the rebound number based on the rebound distance and/or energy or velocity measurements. Examine each impression made on the surface after impact and if the impact has crushed or broken through a near-to-surface void, discount the result. Take a minimum of nine valid readings to obtain a reliable estimate of the rebound number for a test location. Record the position and orientation of the hammer for each set of readings. Ensure that no two impact points are closer than 25 mm and none are within 25 mm of an edge. NOTE It is preferable to draw a regular grid of lines 25 mm to 50 mm apart and take the intersections of the lines as the test points.

PROVA ORALE – TRACCIA 2

- 1) Il candidato descriva l'esecuzione di prove di compressione su cubi e cilindri: modalità operative e differenze tra i due tipi di prova.
- 2) Il candidato illustri l'inserimento di formule in MS Word
- 3) Il candidato traduca dalla lingua inglese il seguente testo (tratto dalla norma EN 12504-4-2012)

In order to provide a measurement of pulse velocity which is reproducible and which depends essentially on the properties of the concrete under test, it is necessary to consider the various factors which can influence pulse velocity and its correlation with various physical properties of the concrete.

Moisture content: The moisture content has two effects on the pulse velocity, one chemical, the other physical. These effects are important in the production of correlations for the estimation of concrete strength. Between a properly cured standard cubical or cylindrical specimen and a structural element made from the same concrete, there can be a significant pulse velocity difference. Much of the difference is accounted for by the effect of different curing conditions on the hydration of the cement, while some of the difference is due to the presence of free water in the voids. It is important that these effects are carefully considered when estimating strength.