

TESTING FRESH SELF COMPACTING CONCRETE (SCC)

ERMCO/EFNARC European Guidelines.

SLUMP-FLOW DETERMINATION

STANDARD: EN 12350-8

To evaluate the flowability of fresh concrete through free flow, and the time needed to spread a 500 mm diameter.

Applicable to concrete with aggregates of 25 mm max. size

C181 SLUMP CONE, galvanized steel

C170-01 PLATE, galvanized steel made, dimensions 900x900 mm, with engraved two circles having 210 and 500 mm diameter and central X cross.



VISCOSITY DETERMINATION V-FUNNEL TEST

STANDARD: EN 12350-9

To evaluate the viscosity and filling ability of self-compacting freshly mixed concrete through the flowing speed from a funnel.

Applicable to concrete with aggregates of 25 mm max. size.

C171 V-FUNNEL, **stainless steel** made, stand mounted. The upper edge of the funnel is smooth and reinforced, and the outflow orifice is equipped of an openable seal valve. Dimensions: 640x340x1050 mm
Weight : 20 kg approx.

C171-11 FILLING HOPPER stainless steel made, to pour the concrete into the funnel in one operation, as specified by the Standard.

V127 BOX, polythene made, to collect the concrete.

C262 STRAIGHT EDGE, 460 mm, to level the concrete.



CONFINED FLOWABILITY DETERMINATION

L BOX TEST

STANDARD: EN 12350-10

To determine the confined flowability of self-compacting freshly mixed concrete, and to evaluate the filling and passing ability and segregation resistance.

Applicable to concrete with aggregates of 25 mm max. size.

C172 L-BOX, **stainless steel** made, consisting of:

- container with inside rigid surfaces,
- Interchangeable sets of grids:
- one set of 3 vertical bars having \varnothing 12 mm and free light of 41 mm
- one set of 2 vertical bars having \varnothing 12 mm and free light of 59 mm
- gate in guillotine form

Dimensions: 712x280x682 mm

Weight: 20 kg approx.

S200-11 STRAIGHT EDGE, 300 mm long, galvanized steel, to level the concrete.

CONFINED FLOWABILITY DETERMINATION

U-SHAPE BOX

STANDARDS: UNI 11044 | RILEM report N. 23

To evaluate the filling speed and height of the concrete sample under its own self-weight, in the U-shape filling box, to determine the self-compactability. The test is performed with highly fluidised fresh concrete with superplasticiser.

Applicable to concrete with aggregates of 25 mm max. size.

C173 U-BOX, **stainless steel** made, with inside smooth walls, equipped of a flow obstacle formed by four vertical reinforcement bars. The bars have \varnothing 10 mm and the light between them is 35 mm.
A gate in guillotine form splits the vertical portion of the box from the horizontal one.
Picture in the next page.

Dimensions: 480x250x680 mm

Weight: 20 kg approx.

S200-11

STRAIGHT EDGE, 300 mm long, galvanized steel, to level the concrete.