OPERATING MANUAL

L-Box for Self-Consolidating Concrete (SCC)
HM-35

INTRODUCTION:

The L-Box test measures the ability of SCC mixes to flow between a set of obstructive bars. Final depth of the concrete at the gate and at the end of the trough is measured and the proportional difference expressed as a blocking ratio. Some versions of this procedure require timing the flow with a stop-watch.

FEATURES:

The HM-35 L-Box consists of a vertical hopper with a sliding gate at the bottom. Three bars representing reinforcing steel and a horizontal trough are positioned in front of the gate. A concrete specimen is placed in the vertical hopper without consolidating. Lifting the slide gate allows the concrete to flow past the bars into the horizontal trough. The HMA-135 12x1.25in (305x32mm) Steel Straightedge is a suggested accessory for striking-off the concrete surface.

OPERATING INSTRUCTIONS:

NOTE: These instructions are intended only as a general guide to the operation of this device. Specific procedures for conducting this test vary widely, and the user is responsible for determining the exact method to be followed.

HM-35

1. Dampen the L-Box. Remove excess water with a moist cloth or damp sponge.
2. Place the L-Box on a level, stable, solid surface, free of vibration.
3. Confirm the sliding gate is closed. Fill the vertical portion (hopper) of the L-Box without vibrating, rodding or tamping.
4. Strike off the concrete with a straightedge at the top of the hopper.
5. Open the sliding gate, and allow the concrete to flow horizontally toward the end of the box.
6. When flow has stopped, measure depth of concrete at the gate (h1) and at the horizontal end of the L-Box (h2). These measurements are commonly used to determine a “blocking” value, computed as h2/h1x100.

Thoroughly clean the L-Box immediately after each use with a brush and water. Any concrete allowed to remain will be difficult to remove later and may affect operation or results.

Rev: 07/06/2016

PHONE: 800-444-1508
740-548-7298
P.O. Box 200, Lewis Center, Ohio 43035-0200
E-mail: customerservice@gilsonco.com **Website:** www.globalgilson.com
FAX: 800-255-5314
740-548-5314