
Standard Method of Test for
Resistance to Degradation of
Small-Size Coarse Aggregate
by Abrasion and Impact in the
Los Angeles Machine

AASHTO Designation: T 96-02 (2019)

Technical Subcommittee: 1c, Aggregates

Release: Group 3 (July)

ASTM Designation: C131-01



American Association of State Highway and Transportation Officials
444 North Capitol Street N.W., Suite 249
Washington, D.C. 20001

Standard Method of Test for

Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

AASHTO Designation: T 96-02 (2019)



Technical Subcommittee: 1c, Aggregates

Release: Group 3 (July)

ASTM Designation: C131-01

AASHTO T 96-02 (2015) is identical to ASTM C131-01 except for the following provisions:

1. All references to the ASTM standards contained in ASTM C131-01, listed in the following table, shall be replaced with the corresponding AASHTO standard.

<i>Referenced Standards</i>	
ASTM	AASHTO
C136	T 27
C702	R 76
D75	R 90

2. Add a new Section after Section 3.1 of ASTM C131-01 as follows:

3.2 DESCRIPTION OF TERMS

Constant Mass—Test sample dried at a temperature of $110 \pm 5^\circ\text{C}$ ($230 \pm 9^\circ\text{F}$) to a condition such that it will not lose more than 0.1 percent moisture after an additional 2 h of drying at $110 \pm 5^\circ\text{C}$ ($230 \pm 9^\circ\text{F}$). Such a condition of dryness can be verified by determining the mass of the sample before and after successive 2-h drying periods. In lieu of such a determination, samples may be considered to have reached constant mass when they have been dried at a temperature of $110 \pm 5^\circ\text{C}$ ($230 \pm 9^\circ\text{F}$) for an equal or longer period than that previously found adequate for producing the desired constant mass condition under equal or heavier loading conditions of the oven.

3. Add to the first sentence in Section 6.1 of ASTM C131-01 as follows:

...machine “equipped with a counter and” conforming...

Also replace the seventh sentence of this section as follows:

“A removable steel shelf shall extend along the length of the cylinder to within 5 mm (0.2 in.) of the full inside length of the cylinder, project inward 89 ± 2 mm (3.5 ± 0.1 in.) and shall be mounted on the interior cylindrical surface of the cylinder, or on the inside surface of the cover, in such a way that a plane centered between the large faces coincides with an axial plane.”

Also, the third from the last sentence of Section 6.1 of ASTM C131-01 is not included in AASHTO T 96-02 (2015).

4. Changes to Figure 1 of ASTM C131-01 are as follows:
 - a. The phrase "NOT LESS THAN 1270 mm MEASURED ON OUTSIDE OF DRUM" is not included in AASHTO T 96-02 (2015).
 - b. The steel wall thickness shall be changed from "12.7 mm THICK" to "12.7 ± 3.2 mm (1/2 ± 1/8 in.) THICK."
5. Add the following after Note 2 in ASTM C131-01:

"NOTE—Due to its mass, the location of the shelf relative to the opening influences the "at rest" position of the opening. The shelf location should be chosen to provide a convenient position of the opening to facilitate the loading of aggregate and spheres and to avoid impact of the charge on the cover."
6. Add the following new section after Section 6.3 of ASTM C131-01:

"6.4 *Oven*—The oven shall be capable of maintaining a uniform temperature of 110 ± 5°C (230 ± 9°F)."
7. Replace Section 6.3 of ASTM C131-01 with the following:

"*Balance*—The balance shall conform to AASHTO M 231, Class G 5."