Australian Standard™

Methods for sampling and testing aggregates

Method 41: Polished aggregate friction value—Horizontal bed machine

1 SCOPE This Standard sets out the method for determining the polished aggregate friction value (PAFV) of naturally occurring or artificially produced materials which are intended to be used as, or to be a source of, pavement surfacing material by polishing using the horizontal bed machine. Following accelerated polishing of the material by this method the PAFV is determined by the method in AS 1141.42.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS
1141 Method for sampling and testing aggregates
1141.42 Method 42: Pendulum friction test
1152 Test sieves
1487 Abrasive grain size

3 DEFINITIONS For the purpose of this Standard, the definitions below apply.

3.1 Dummy specimens—specimens that have been polished and tested, which would otherwise be discarded. They are used to make up the number of specimens to nine when less than eight test specimens are to be polished.

3.2 Polished aggregate friction value (PAFV)—the friction value obtained for specimens prepared, polished and tested in accordance with this Standard.

3.3 Reference material—aggregate from the specified source known as Panmure basalt for which the unpolished and polished friction values are known (see Appendix A).

NOTE: Panmure basalt is used as a reference material.

3.4 Reference specimens—specimens incorporating reference material prepared in accordance with Appendix A. One unused reference specimen is included in each test run and is polished and tested at the same time as the test specimens. Its function is to indicate whether the polishing and testing procedures have been correctly carried out.

3.5 Test specimens—specimens incorporating aggregate prepared from a material for which the PAFV is required.

4 APPARATUS The following apparatus is required:

(a) *Horizontal bed polishing machine*—(see Figures 1 and 2) rigidly mounted on a firm level base, and comprised and constructed as follows:

(i) *Specimen bed*—an electrically driven circular specimen bed of about 700 mm in diameter, revolving at 33 r/min to 35 r/min, and with provision for accurately positioning the nine specimens.