

Standard Test Methods for Pervious Pavements

The following is a list of test methods that have been developed or are currently under development and that may be useful for developing local pervious concrete standards. This list was developed by Liv Haselbach, P.E., PhD, LEED® AP, Associate Professor Civil and Environmental Engineering, Washington State University, Pullman, WA.

- a) Testing Methods for Acceptance of Product from the Producer
 - i) ASTM _____: Fresh Concrete Density (Unit Weight) and Void Content
 - This method is still under Development by ASTM C09/49 Pervious Concrete. Anticipated to be finalized in 2009.

- b) Installed Pavement Testing Methods
 - i) ASTM _____: Field Permeability (Infiltration Rate)
 - Under Development by ASTM C09/49 Pervious Concrete. Anticipated to be finalized in 2009 or 2010. Expected method title: “Standard Test Method for Infiltration Rate of In Place Pervious Concrete”.
 - ii) ASTM _____: Compressive Strength
 - Under Development by ASTM C09/49 Pervious Concrete
 - iii) ASTM _____: Hardened Concrete Density and Porosity
 - Under Development by ASTM C09/49 Pervious Concrete
 - A similar method is also being developed by the ASTM-equivalent organization in Canada.
 - iv) ASTM _____: Flexural Strength
 - Under Development by ASTM C09/49 Pervious Concrete

- c) Miscellaneous Testing Methods
 - i) Haselbach, L.M., and Freeman, R.M., “Effectively Estimating In-situ Porosity of Pervious Concrete from Cores”, *Journal of ASTM International*, 4(7), 2007.
 - ii) Montes, F., Valavala, S., and Haselbach, L., “A New Test Method for Porosity Measurements of Portland Cement Pervious Concrete”, *Journal of ASTM International*, 2(1), 2005.
 - iii) Crouch, L. K., Cates, M. A., Dotson, V. J., Honeycutt, K. R., and Badoe, D. A., “Measuring the Effective Air Void Content of Portland Cement Pervious Pavements”, *Cement, Concrete and Aggregates*, 25(1), 2003.