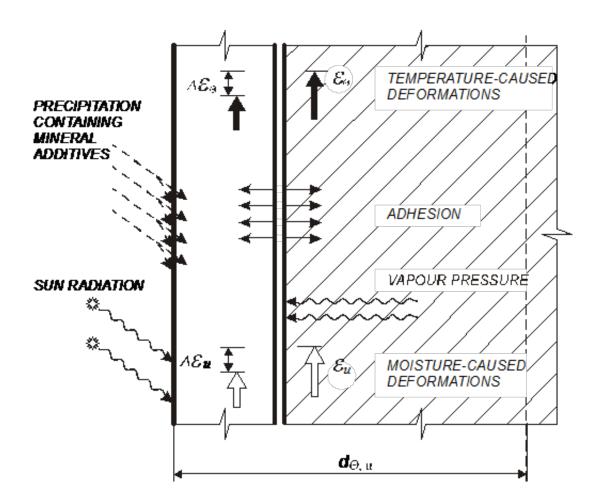


Destructive factors causing deterioration of paints on buildings walls

May 28 2015



Dr. Ruta Miniotaite of the University of Technology (KTU), Lithuania, has conducted a series of investigations on how various destructive factors affect painted building walls. According to Miniotaite, the



external surface of building walls is continuously affected by the natural climate of variable intensity and the factors occurring due to anthropogenic activity.

The heat and mass exchange between outside air and walls is the most distinct in a relatively thin <u>surface layer</u>. The activity of physical processes, substantial variations of temperature and moisture and other effects of various origins are particularly distinct in that layer. Durability of the surfaces depends on the prevailing climate effects and on a complex of physical and mechanical values of the materials used. The complex and partial methods have been worked out for application at investigation of destruction processes.

Miniotaite, who is working in KTU Department of Civil Engineering Technologies, says that partial methods were applied to investigate physical and mechanical characteristics of various objects, before necessary direct weather durability tests in the climatic chamber along the programme of evaluation of simulated effects were carried through.

It has been established that paint under consideration should be assessed according to its composition and macrostructure characteristics, and base or primer layer (which is later covered) for its susceptibility to moisture absorption and deformation.

Provided by Kaunas University of Technology

Citation: Destructive factors causing deterioration of paints on buildings walls (2015, May 28) retrieved 26 April 2024 from <u>https://phys.org/news/2015-05-destructive-factors-deterioration-walls.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.