

The German Standards for Building with Earth



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ABSTRACT

In Germany, the use of earth as a building material has a very long tradition. Earth was the mass building material used by the lower classes. The first technical standards in the field date back to the 16th century. Immediately after the Second World War a number of DIN-Standards were developed for building with earth, but were later withdrawn in 1971 as earth was then rarely used as a building material.

The 'rediscovery' of earth as an ecological building material at the beginning of the 1980's led to a demand for up-to-date standards for building with earth. In 1999 the Dachverband Lehm e.V., the German Association for Building with Earth, issued the *Lehmbau Regeln*, the German standards for building with earth. This standard was approved by the German Federal State Building Authority as a national building standard and recommended for inclusion in the building codes of the 16 German Federal States. The paper describes this process of implementation in order to assist other countries in establishing their own regulations.

The *Lehmbau Regeln* specify the types of soil suitable for earth construction and appropriate tests for selecting soils. They describe the various earth wall construction methods and materials for specific applications and detail the design procedures for each of these methods including non-load-bearing walls, ceilings, plasters and renders.

The *Lehmbau Regeln* are the first contemporary national standards for building with earth in the European Community. The first revised edition will be published in 2008.

KEY WORDS :

Building with earth, standards, Germany