

# Encyclopedia of Engineering Geology

Living Edition

| Editors: Peter Bobrowsky, Brian Marker

## Residual Soils

- Isabel M. R. Duarte (1) Email author (iduarte@uevora.pt)
- Carlos M. G. Rodrigues (2)

1. GeoBioTec Research Centre (UID/GEO/04035/2013), Department of Geosciences, School of Sciences and Technology, University of Évora, Évora, Portugal
2. CEC/FE/UP Research Centre, Polytechnic Institute of Guarda, Guarda, Portugal

Living reference work entry

First Online: 15 March 2017

Received: 15 February 2017

Accepted: 27 February 2017

**DOI (Digital Object Identifier):** [https://doi.org/10.1007/978-3-319-12127-7\\_237-1](https://doi.org/10.1007/978-3-319-12127-7_237-1)

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### Synonyms

Alteration products (<http://link.springer.com/search?facet-content-type=ReferenceWorkEntry&query=Alteration%20products>); Lateritic soils (<http://link.springer.com/search?facet-content-type=ReferenceWorkEntry&query=Lateritic%20soils>); Saprolites (<http://link.springer.com/search?facet-content-type=ReferenceWorkEntry&query=Saprolites>); Weathering products (<http://link.springer.com/search?facet-content-type=ReferenceWorkEntry&query=Weathering%20products>)

## Definition

Residual soil is the material resulting from the in situ weathering of the parent rock which has not been transported from its place of origin.

Residual soils are distributed throughout many regions of the world, such as Africa, South Asia, Australia, Southeastern North America, Central and South America, and considerable regions of Europe. The largest areas and thicknesses of these soils occur normally in humid tropical regions, such as Brazil, Nigeria, South India, Singapore, and the Philippines.

## Characteristics

According to Duarte (2002), the diversity exhibited by the residual soils is due, not so much, to the lithology of the original rock, but mainly to external factors such as climate, topography, and vegetation cover; factors that provide distinctive weathering processes; and, consequently, distinctive weathering products – the residual soils. At the first International Conference on...

## Keywords

Clay Permeability Hydrolysis Hydrated Silicate

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## How to cite

Cite this entry as:

Duarte I.M.R., Rodrigues C.M.G. (2017) Residual Soils. In: Bobrowsky P., Marker B. (eds) Encyclopedia of Engineering Geology. Encyclopedia of Earth Sciences Series. Springer, Cham

## About this entry

- DOI (Digital Object Identifier) <https://doi.org/10.1007/978-3-319-12127-7>
- Publisher Name Springer, Cham
- Online ISBN 978-3-319-12127-7
- eBook Packages [Earth and Environmental Science](#)
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