Record Nr.	UNISA996206175603316
Titolo Pubbl/distr/stampa	Recommendations on excavations EAB [[electronic resource]] Berlin, : Ernst & Sohn, c2008
ISBN	1-282-02198-2 9786612021985 3-433-60024-4 3-433-60025-2
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (302 p.)
Disciplina	624.152
Soggetti	Excavation - Standards Earthwork
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Translation of the 4th German edition, published by the German Geotechnical Society (Deutsche Gesellschaft fur Geotechnik e. V., DGGT).
Nota di contenuto	Recommendations on Excavations EAB; Members of the Working Group for Excavations; Preface; Contents; Notes for the user; 1 General Recommendations; 1.1 Engineering requirements for applying the Recommendations (R I); 1.2 Governing regulations (R 76); 1.3 New safety factor approach (R 77); 1.4 Limit states (R 78); 1.5 Support of retaining walls (R 67); 1.6 Using the EAB in conjunction with Eurocode 7-1 (R 105, draft); 2 Analysis principles; 2.1 Actions (R 24); 2.2 Determination of soil properties (R 2); 2.3 Earth pressure angle (R 89); 2.4 Partial safety factors (R 79) 2.5 General requirements for adopting live loads (R 3)2.6 Live loads from road and rail traffic (R 55); 2.7 Live loads from site traffic and site operations (R 56); 2.8 Live loads from excavators and lifting equipment (R 57); 3 Magnitude and distribution of earth pressure; 3.1 Magnitude of earth pressure as a function of the selected construction method (R 8); 3.2 Magnitude of active earth pressure without surcharge loads (R 4); 3.3 Distribution of active earth pressure from live loads (R 6) 3.5 Distribution of active earth pressure from live loads (R 7)3.6

1.

	Superimposing earth pressure components with surcharges (R 71); 3.7 Determination of at-rest earth pressure (R 18); 3.8 Earth pressure in retreating states (R 68); 4 General stipulations for analysis; 4.1 Stability analysis (R 81); 4.2 General information on analysis methods (R 11); 4.3 Determination and analysis of embedment depth (R 80); 4.4 Determination of action effects (R 82); 4.5 Limit load design method (R 27); 4.6 Modulus of subgrade reaction method (R 102); 4.7 Finite- element method (R 103) 4.8 Verification of the vertical component of the mobilised passive earth pressure (R 9)4.9 Verification of the transmission of vertical forces into the subsurface (R 84); 4.10 Stability analyses for braced excavations in special cases (R 10); 4.11 Verification of serviceability (R 83); 4.12 Allowable simplifications in the STR limit state (R 104, draft); 5 Analysis approaches for soldier pile walls; 5.1 Determination of load models for soldier pile walls (R 12); 5.2 Pressure diagrams for supported soldier pile walls (R 69) 5.3 Passive earth pressure for soldier pile walls (R 25); 5.5 Equilibrium of horizontal forces for soldier pile walls (R 15); 6 Analysis approaches for sheet pile walls and in-situ concrete walls; 6.1 Determination of load models for sheet pile walls and in-situ concrete walls (R 16); 6.2 Pressure diagrams for supported sheet pile walls and in-situ concrete walls (R 70); 6.3 Ground reactions and passive earth pressure for sheet pile walls and in-situ concrete walls (R 19) 6.4 Toe restraint for sheet pile walls and in-situ concrete walls (R 26)
Sommario/riassunto	The aim of these recommendations is to harmonize and further develop the methods, according to which excavations are prepared, calculated and carried out. Since 1980, these have been drawn up by the working group ""Excavations"" at the German Geotechnical Society (Deutsche Gesellschaft f?r Geotechnik DGGT) and are similar to a set of standards. They help to simplify analysis of excavation enclosures, to unify load approaches and analysis procedures, to guarantee the stability and serviceability of the excavation structure and its individual components, and to find out an economic design of