



30.9.2024

Geoteknisiä tutkimuksia, monitorointia ja geoteknisten rakenteiden koekuormitusta koskevat standardit

Tässä asiakirjassa esitetään voimassa olevat geoteknisiä tutkimuksia, monitorointia ja geoteknisten rakenteiden koekuormitusta koskevien standardien luettelo. Koonnin tarkoituksena on jakaa tietoa standardien voimaantulosta ja tehdyistä päivityksistä. Luetteloa on tarkoitus päivittää vuosittain. Sitä käytettäessä on hyvä ottaa huomioon, että SFS vahvistaa ja julkaisee standardeja sitä mukaan, kun niitä valmistuu, jolloin ajantasaisin tieto on saatavissa SFS:sta (www.sfs.fi).

Standardeja tulee noudattaa Väyläviraston hankkeissa LO 10/2015 mukaisesti.

Identification and classification of soil/rock

Maan/kallio tunnistaminen ja luokitus

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO 14688-1:2017 / SFS-EN ISO 14688-1:2018	Geotechnical investigation and testing — Identification and classification of soil — Part 1: Identification and description Geotekninen tutkimus ja testaus. Maan tunnistaminen ja luokitus. Osa 1: Tunnistaminen ja kuvaus	12.12.2017 -	27.2.2018 30.3.2021
ISO 14688-2:2017 / SFS-EN ISO 14688-2:2018	Geotechnical investigation and testing — Identification and classification of soil — Part 2: Principles for a classification Geotekninen tutkimus ja testaus. Maan tunnistaminen ja luokitus. Osa 2: Luokituksen perusteet	12.12.2017 -	27.2.2018 30.3.2021
ISO 14689:2017 / SFS-EN ISO 14689:2018	Geotechnical investigation and testing — Identification, description and classification of rock Geotekninen tutkimus ja testaus. Kallion tunnistus, kuvaus ja luokitus	12.12.2017 -	27.2.2018 30.3.2021

Lisätietoja: Panu Tolla ja Veli-Matti Uotinen

Väylävirasto

PL 33, 00521 Helsinki
Opastinsilta 12 A, 00520 Helsinki

Puhelin 0295 34 3000
Faksi 0295 34 3700

etunimi.sukunimi@vayla.fi
kirjaamo@vayla.fi
www.vayla.fi



30.9.2024

Geothermal testing

Maan lämpötekninen testaus

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO 17628:2015 / SFS-EN ISO 17628	Geotechnical investigation and testing — Geothermal testing — Determination of thermal conductivity of soil and rock using a borehole heat exchanger	22.7.2015	2.10.2015

Laboratory testing of soil/rock

Maan/kallio laboratorikokeet

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO/DIS16383-1	Geotechnical investigation and testing — Laboratory testing of rock — Part 1: Determination of water content	Työn alla	-
ISO/WD 16383-2	Geotechnical investigation and testing — Laboratory testing of rock — Part 2: Determination of bulk density	Työn alla	-
ISO 17892-1:2014 / SFS-EN ISO 17892-1	Geotechnical investigation and testing — Laboratory testing of soil — Part 1: Determination of water content Geotekninen tutkimus ja testaus. Maan laboratorikokeet. Osa 1: Vesipitoisuuden määrittäminen	28.11.2014 -	6.2.2015 30.3.2021
ISO 17892-1:2014/Amd 1:2022 / SFS-EN ISO 17892-1:2015/A1:2022	Geotechnical investigation and testing — Laboratory testing of soil — Part 1: Determination of water content — Amendment 1	2.5.2022	31.5.2022
ISO 17892-2:2014 / SFS-EN ISO 17892-2	Geotechnical investigation and testing — Laboratory testing of soil — Part 2: Determination of bulk density Geotekninen tutkimus ja testaus. Maan laboratorikokeet. Osa 2: Irtohiiden määrittäminen	28.11.2014 -	6.2.2015 30.3.2021



ISO 17892-3:2015 / SFS-EN ISO 17892-3	Geotechnical investigation and testing — Laboratory testing of soil — Part 3: Determination of particle density Geotekninen tutkimus ja testaus. Maan laboratoriokokeet. Osa 3: Kiintotiheyden määrittäminen	25.11.2015 -	12.1.2016 30.3.2021
ISO 17892-4:2016 / SFS-EN ISO 17892-4:2016	Geotechnical investigation and testing — Laboratory testing of soil — Part 4: Determination of particle size distribution Geotekninen tutkimus ja testaus. Maan laboratoriokokeet. Osa 4: Rakeisuuden määrittäminen	28.10.2016 -	13.12.2016 30.3.2021
ISO 17892-5:2017 / SFS-EN ISO 17892-5:2017	Geotechnical investigation and testing — Laboratory testing of soil — Part 5: Incremental loading oedometer test	3.3.2017	4.4.2017
ISO 17892-6:2017 / SFS-EN ISO 17892-6:2017	Geotechnical investigation and testing — Laboratory testing of soil — Part 6: Fall cone test Geotekninen tutkimus ja testaus. Maan laboratoriokokeet. Osa 6: Kartiokoe	3.3.2017 -	4.4.2017 30.3.2021
ISO 17892-7:2017 / SFS-EN ISO 17892-7:2018	Geotechnical investigation and testing — Laboratory testing of soil — Part 7: Unconfined compression test	6.12.2017	27.2.2018
ISO 17892-8:2018 / SFS-EN ISO 17892-8:2018	Geotechnical investigation and testing — Laboratory testing of soil — Part 8: Unconsolidated undrained triaxial test	14.2.2018	3.4.2018
ISO 17892-9:2018 / SFS-EN ISO 17892-9:2018	Geotechnical investigation and testing — Laboratory testing of soil — Part 9: Consolidated triaxial compression tests on water saturated soils	28.2.2018	17.4.2018
ISO 17892-10:2018 / SFS-EN ISO 17892-10:2019	Geotechnical investigation and testing — Laboratory testing of soil — Part 10: Direct shear tests	15.11.2018	8.1.2019
ISO 17892-11:2019 / SFS-EN ISO 17892-11:2019	Geotechnical investigation and testing — Laboratory testing of soil — Part 11: Permeability tests	30.1.2019	12.3.2019
ISO 17892-12:2018 / SFS-EN ISO 17892-12:2018	Geotechnical investigation and testing — Laboratory testing of soil — Part 12: Determination of liquid and plastic limits	6.6.2018	7.8.2018
ISO 17892-12:2018/AMD 1:2021 / SFS-EN ISO 17892-12:2018/A1:2021	Geotechnical investigation and testing — Laboratory testing of soil — Part 12: Determination of liquid and plastic limits — Amendment 1	24.8.2021	21.9.2021
ISO 17892-12:2018/AMD 2:2022 / SFS-EN ISO 17892-12:2018/A2:2022	Geotechnical investigation and testing — Laboratory testing of soil — Part 12: Determination of liquid and plastic limits — Amendment 2	3.3.2022	29.3.2022



ISO/AWI 17892-13	Geotechnical investigation and testing — Laboratory testing of soil — Part 13: Swelling test for Soils, Hard Soils and Soft Rocks — Procedure with cycles on a single specimen	Työn alla	-
------------------	--	-----------	---

Geotechnical monitoring by field instrumentation

Geotekninen monitorointi kenttämittauksilla

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO 18674-1:2015 / SFS-EN ISO 18674-1	Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation — Part 1: General rules	18.5.2015	3.7.2015
ISO 18674-2:2016 / SFS-EN ISO 18674-2:2016	Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation — Part 2: Measurement of displacements along a line: Extensometers	19.10.2016	6.12.2016
ISO 18674-3:2017 / SFS-EN ISO 18674-3:2017	Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation — Part 3: Measurement of displacements across a line: Inclinometers	30.10.2017	19.12.2017
ISO 18674-3:2017/Amd 1:2020 / SFS-EN ISO 18674-3:2017/A1:2020	Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation — Part 3: Measurement of displacements across a line: Inclinometers — Amendment 1	13.1.2020	7.4.2020
ISO 18674-4:2020 / SFS-EN ISO 18674-4:2020	Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation — Part 4: Measurement of pore water pressure: Piezometers	26.6.2020	27.7.2020
ISO 18674-5:2019 / SFS-EN ISO 18674-5:2019	Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation — Part 5: Stress change measurements by total pressure cells (TPC)	10.10.2019	12.11.2019
ISO/AWI 18674-6	Geotechnical investigation and testing - Geotechnical monitoring by field instrumentation — Part 6: Measurement of settlement: Hydraulic settlement systems	Työn alla	-
ISO/DIS 18674-7	Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation — Part 7: Measurement of strains: Strain gauges	Työn alla	-



ISO 18674-8:2023	Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation — Part 8: Measurement of loads: Load cells	14.9.2023	3.10.2023
ISO/AWI 18674-9	Geotechnical investigation and testing - Geotechnical monitoring by field instrumentation — Part 9: Measurement of displacements by geodetic means	Työn alla	-

Geohydraulic testing

Geohydrauliset kokeet

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO 22282-1:2012 / SFS-EN ISO 22282-1	Geotechnical investigation and testing — Geohydraulic testing — Part 1: General rules	1.6.2012	8.2.2013
	Geotekninen tutkimus ja testaus. Geohydrauliset kokeet. Osa 1: Yleiset säännöt	-	22.8.2017
ISO 22282-2:2012 / SFS-EN ISO 22282-2	Geotechnical investigation and testing — Geohydraulic testing — Part 2: Water permeability tests in a borehole using open systems	1.6.2012	8.2.2013
ISO 22282-3:2012 / SFS-EN ISO 22282-3	Geotechnical investigation and testing — Geohydraulic testing — Part 3: Water pressure tests in rock	1.6.2012	8.2.2013
	Geotekninen tutkimus ja testaus. Geohydrauliset kokeet. Osa 3: Kalliope- rän vesimenekikokeet	-	22.8.2017
ISO 22282-4:2021 / SFS-EN ISO 22282-4	Geotechnical investigation and testing — Geohydraulic testing — Part 4: Pumping tests	22.3.2021	20.4.2021
ISO 22282-5:2012 / SFS-EN ISO 22282-5	Geotechnical investigation and testing — Geohydraulic testing — Part 5: Infiltrometer tests	1.6.2012	8.2.2013
ISO 22282-6:2012 / SFS-EN ISO 22282-6	Geotechnical investigation and testing — Geohydraulic testing — Part 6: Water permeability tests in a borehole using closed systems	1.6.2012	8.2.2013



30.9.2024

Sampling methods and groundwater measurements

Näytteenotto ja pohjavesimittaukset

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO 22475-1:2021 / SFS-EN ISO 22475-1:2021	Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 1: Technical principles for the sampling of soil, rock and groundwater	5.10.2021	2.11.2021

Field testing

Kenttäkokeet

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO 22476-1:2022 / SFS-EN ISO 22476-1:2023	Geotechnical investigation and testing — Field testing — Part 1: Electrical cone and piezocone penetration test	1.12.2022	24.1.2023
ISO 22476-2:2005 / SFS-EN ISO 22476-2	Geotechnical investigation and testing — Field testing — Part 2: Dynamic probing	26.1.2005	6.5.2005
	Geotekninen tutkimus ja koestus. Kenttäkokeet. Osa 2: Heijarikairaus	-	12.12.2008
ISO 22476-2:2005/Amd 1:2011 / SFS-EN ISO 22476-2/A1	Geotechnical investigation and testing — Field testing — Part 2: Dynamic probing — Amendment 1	9.11.2011	10.2.2012
ISO 22476-3:2005 / SFS-EN ISO 22476-3	Geotechnical investigation and testing — Field testing — Part 3: Standard penetration test	26.1.2005	6.5.2005
ISO 22476-3:2005/Amd 1:2011 / SFS-EN ISO 22476-3/A1	Geotechnical investigation and testing — Field testing — Part 3: Standard penetration test — Amendment 1	10.11.2011	10.2.2012
ISO 22476-4:2021 / SFS-EN ISO 22476-4:2021	Geotechnical investigation and testing — Field testing — Part 4: Prebored pressuremeter test by Ménard procedure	1.9.2021	28.9.2021
ISO 22476-5:2023	Geotechnical investigation and testing — Field testing — Part 5: Prebored pressuremeter test	1.3.2023	25.4.2023



ISO 22476-6:2018 / SFS-EN ISO 22476-6:2018	Geotechnical investigation and testing — Field testing — Part 6: Self-boring pressuremeter test	20.9.2018	6.11.2018
ISO 22476-7:2012 / SFS-EN ISO 22476-7	Geotechnical investigation and testing — Field testing — Part 7: Borehole jack test	28.11.2012	8.2.2013
ISO 22476-8:2018 / SFS-EN ISO 22476-8:2018	Geotechnical investigation and testing — Field testing — Part 8: Full displacement pressuremeter test	20.9.2018	6.11.2018
ISO 22476-9:2020 / SFS-EN ISO 22476-9	Geotechnical investigation and testing — Field testing — Part 9: Field vane test (FVT and FVT-F)	7.9.2020	6.10.2020
ISO 22476-10:2017 / SFS-EN ISO 22476-10:2017	Geotechnical investigation and testing — Field testing — Part 10: Weight sounding test	9.10.2017	5.12.2017
ISO 22476-11:2017 / SFS-EN ISO 22476-11:2017	Geotechnical investigation and testing — Field testing — Part 11: Flat dilatometer test	20.4.2017	6.6.2017
ISO 22476-12:2009 / SFS-EN ISO 22476-12	Geotechnical investigation and testing — Field testing — Part 12: Mechanical cone penetration test (CPTM)	15.5.2009	4.9.2009
ISO 22476-14:2020 / SFS-EN ISO 22476-14:2020	Geotechnical investigation and testing — Field testing — Part 14: Borehole dynamic probing	19.2.2020	17.3.2020
ISO 22476-15:2016 / SFS-EN ISO 22476-15:2016	Geotechnical investigation and testing — Field testing — Part 15: Measuring while drilling	12.8.2016	13.9.2016
ISO 22476-16	Geotechnical investigation and testing — Field testing — Part 16: Borehole shear test	Julkaisun alla (9/2024)	-

Testing of geotechnical structures

Geoteknisten rakenteiden testaus

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO 22477-1:2018 / SFS-EN ISO 22477-1:2018	Geotechnical investigation and testing — Testing of geotechnical structures — Part 1: Testing of piles: static compression load testing	31.10.2018	25.12.2018
ISO 22477-2:2023	Geotechnical investigation and testing — Testing of geotechnical structures — Part	1.7.2023	15.8.2023



30.9.2024

	2: Testing of piles: Static tension load testing		
ISO 22477-4:2018 / SFS-EN ISO 22477-4:2018	Geotechnical investigation and testing — Testing of geotechnical structures — Part 4: Testing of piles: dynamic load testing	16.3.2018	24.4.2018
ISO 22477-5:2018 / SFS-EN ISO 22477-5:2018	Geotechnical investigation and testing — Testing of geotechnical structures — Part 5: Testing of grouted anchors Geotekninen tutkimus ja testaus. Geoteknisten rakenteiden testaaminen. Osa 5: Injektoitujen ankkurien testaus	13.8.2018 -	2.10.2018 2.11.2021
ISO/CD 22477-6	Geotechnical investigation and testing — Testing of geotechnical structures — Part 6: Load testing of soil nails and rock bolts	Työn alla	-
ISO 22477-10:2016 / SFS-EN ISO 22477-10	Geotechnical investigation and testing — Testing of geotechnical structures — Part 10: Testing of piles: rapid load testing	14.9.2016	18.10.2016

Array measurement of microtremors to estimate shear wave velocity profile

Microtremor-mittaus

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO 24057:2022	Array measurement of microtremors to estimate shear wave velocity profile	1.11.2022	4.11.2022

Qualification criteria and assessment

Pätevyysvaatimukset ja arviointi

Standardin numero	Standardin nimi	Julkaisupäivämäärä	
		ISO	CEN
ISO/TS 24283-1:2022 /	Qualification criteria and assessment — Part 1: Qualified technician and qualified operator	6.1.2022	1.2.2022



30.9.2024

CEN ISO/TS 24283-1:2022	Geotekninen tutkimus ja testaus. Pätevyysvaatimukset ja arviointi. Osa 1: Päteväksi osoitettu käyttäjä	-	7.6.2022
ISO/TS 24283-2:2022 / CEN ISO/TS 24283-2:2022	Qualification criteria and assessment — Part 2: Responsible expert Geotekninen tutkimus ja testaus. Pätevyysvaatimukset. Osa 2: Vastaava asiantuntija	6.1.2022 -	1.2.2022 7.6.2022
ISO/TS 24283-3:2022 / CEN ISO/TS 24283-3:2022	Qualification criteria and assessment — Part 3: Qualified enterprise	6.1.2022	1.2.2022