CSA GROUP™

CSA W208:20
National Standard of Canada

Erosion and sediment control installation and maintenance

Standards Council of Canada
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Contents

Preface

This is the first edition of CSA W208, *Erosion and sediment control installation and maintenance.*

The purpose of this Standard is to provide requirements and recommendations for the installation and maintenance of erosion and sediment control (ESC) measures on construction sites. Compliance with this Standard will allow users to demonstrate that implementation of erosion and sediment control measures was completed using best practices and in accordance with the site-specific erosion and sediment control plan (ESCP). The Standard further supports an open dialogue between those installing and maintaining ESC measures and those who own or regulate the project, as well as the designer of the ESCP. This Standard pulls from industry expertise and best practices in Canada and internationally to help bring forward the key installation and maintenance activities that can support effective application and functionality of commonly used ESC measures.

Users of this Standard are reminded that additional and site-specific requirements might be specified by a federal, provincial/territorial, municipal, or other authority, or by a project owner. This Standard should not be considered a replacement for the requirements contained in any

a) applicable federal/territorial, or provincial statute;
b) regulation, license, or permit issued pursuant to an applicable statute; or
c) contract that an owner has with a contractor

CSA Group gratefully acknowledges the generous support of the Canadian Chapter of the International Erosion Control Association (CAN-IECA) in making possible the development of this Standard.

This Standard was prepared by the Subcommittee on Erosion and Sediment Control Installation and Maintenance under the jurisdiction of the Technical Committee on Erosion and Sediment Control and the Strategic Steering Committee on Natural Resources, and has been formally approved be the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
4) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include "Request for interpretation" in the subject line:*
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   b) *provide an explanation of circumstances surrounding the actual field condition; and*
   c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

   Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at standardsactivities.csa.ca.*

5) *This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include "Proposal for change" in the subject line:*
   a) *Standard designation (number);*
   b) *relevant clause, table, and/or figure number;*
   c) *wording of the proposed change; and*
   d) *rationale for the change.*

CSA W208:20
Erosion and sediment control installation and maintenance

0 Introduction

Almost all construction activities will disturb the ground surface in one way or another. Mitigating the impact of erosion of disturbed ground and sedimentation of watercourses during construction is critical for the protection of existing infrastructure like sewers, catch-basins and stormwater management ponds, fish and wildlife habitat, people, and property.

Controlling erosion and managing sediment during construction is achieved through the application of erosion and sediment control (ESC) measures according to a project-specific erosion and sediment control plan (ESCP). Some ESC measures are applied before disturbing the ground, while others are implemented during construction. Regardless of when an ESC measure is installed, all ESC measures need to be actively maintained until earthworks are complete and the project site is stabilized by establishing vegetative cover or installation of a permanent erosion resistant surface.

Erosion, and generation of sediment, at an active construction project is common. However, when properly managed, erosion and sediment will not cause harm to people, or damage property or habitat. When it isn't managed, the release of sediment from a construction site will likely cause or contribute to harm of people, property, and habitat (the environment).

Existing federal, provincial, and municipal environmental legislation is designed to protect people, property, and the natural environment. In general, legislation prohibits release of any material, including sediment, which could cause an adverse effect to people, property, or the environment.

The ESC industry is made up of specialists, including erosion and sediment control plan designers, installers, inspectors, and civil construction and earthworks contractors. The industry has never had clear, repeatable guidance on what information or instructions, relative to installing and maintaining ESC measures, are required in an ESCP. This is necessary to ensure the measures installed to control the release of sediment are installed and maintained correctly and are appropriate for the site and conditions from jurisdiction to jurisdiction across the country.

This Standard provides a framework that describes the key success factors for installation and maintenance of ESC measures that ESCP designers typically include in plans.

The Standard is laid out to facilitate open communication across the ESC industry, contractors, approval authorities, and project owners.

The purpose of the Standard is to provide consistency in what and how ESC measures are installed and maintained at construction projects across the country. This will help protect the environment from impairment by providing approval authorities with the confidence that specified ESC measures are effectively preventing adverse effects on people, property, and the environment.

The ESC measures included in this Standard are presented in a series of matrices, organized by function and intended application for quick reference.

1 Scope

1.1 General

This Standard outlines installation and maintenance requirements associated with a number of commonly used ESC measures. In addition, this Standard provides general best practice guidance for installing and maintaining ESC measures in conjunction with construction activity, including standardized guidance with respect to adhering to product manufacturer instructions. This Standard further provides guidance for evaluating and selecting ESC measures based on intended functionality and site-specific applications.

1.2 Application

The requirements provided in this Standard apply to construction projects or related activities that result in disturbed ground, including vegetation removal, excavations, grading, and development related activities. This Standard also applies where ESC measures are required by contract, permit, approval, regulation, or other authorization.

The installation of ESC measures is conducted with oversight by a qualified individual according to the details contained in the erosion and sediment control plan. Once ESC measures have been installed, maintenance of the measures are performed to maintain their integrity until such time that stabilization goals have been achieved at the completion of a project phase.

This Standard applies to the installation and maintenance of ESC measures during soil disturbing activities including

a) earth works (e.g., stripping and grading, clearing and grubbing);
b) construction of structures (including but not limited to housing subdivisions and commercial centres);
c) construction of infrastructure (including but not limited to roads, bridges, utilities, sewers, and watermains); and
d) expansion or rehabilitation of any of these facilities or structures.

1.3 Structure

This Standard consists of three parts. The first part provides general requirements for installing and maintaining ESC measures. Secondly, the Standard provides a quick reference guide, arranged by functional need and appropriate application, for a number of commonly applied ESC measures and processes. Finally, for each of the measures and processes covered in the reference table (see Table 1), installation and maintenance requirements are provided.

1.4 Users

This Standard is intended for use by those with a vested interest in ESC elements of construction projects. Stakeholders might include project owners, regulatory authorities, design professionals, qualified erosion and sediment control inspectors, contractors, contract administrators, and other persons interested in the successful installation and maintenance of ESC measures.

In general, this Standard is also intended for use where applicable standards aren't currently available.

1.5 Terminology

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that

which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

2 Reference publications

This Standard refers to the following publications, and where such reference is made, it shall be to the editions listed below.

CSA Group

CAN/CSA-W202-18
Erosion and sediment control inspection and monitoring

CCME (Canadian Council of Ministers of the Environment)

Guidelines for Compost Quality, 2005

MOE (Ontario Ministry of the Environment, Waste Management Policy Branch)

Ontario Compost Quality Standards, 2012

3 Definitions and abbreviations

3.1 Definitions

The following definitions shall apply in this Standard.

Erosion controls — controls that impede the detachment of soil particles by wind or water.

Sediment controls — controls that promote the deposition of detached soil particles.

3.2 Abbreviations

The following abbreviations shall apply in this Standard.

ESC — erosion and sediment control

ESCP — erosion and sediment control plan

TRM — turf reinforcement matting

