

STN	Drevo a výrobky z dreva. Výpočet sekvestrácie atmosférického oxidu uhličitého.	STN EN 16449 49 0109
------------	---	--

Wood and wood-based products - Calculation of the biogenic carbon content of wood and conversion to carbon dioxide

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/14

Obsahuje: EN 16449:2014

119377

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2014
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

ICS 79.040

English Version

Wood and wood-based products - Calculation of the biogenic carbon content of wood and conversion to carbon dioxide

Produits en bois et dérivés du bois - Calcul du contenu en carbone biogénique du bois et conversion en dioxyde de carbone

Holz und Holzprodukte - Berechnung des biogenen Kohlenstoffgehalts im Holz und Umrechnung in Kohlenstoffdioxid

This European Standard was approved by CEN on 20 December 2013.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents		Page
Foreword.....		3
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Wood – the basic material	5
5	Calculating carbon dioxide based on biogenic carbon content.....	5
Annex A (informative) Formula (1), Calculation example.....		7
Bibliography.....		8

Foreword

This document (EN 16449:2014) has been prepared by Technical Committee CEN/TC 175 "Round and sawn timber", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

By the process of photosynthesis, growing trees absorb (sequester) atmospheric carbon dioxide which is then, together with the release of some of the oxygen back into the atmosphere, incorporated, within the cambium, into the cells of the tree as both wood and bark.

The absorbed carbon dioxide is effectively fixed in the wood as biogenic carbon. When using wood, that biogenic carbon is transferred to the product system. Wood products therefore constitute a pool (reservoir) of biogenic carbon for the duration of their service lifetime as those products. At end-of-life, that carbon leaves the product system; in the case of use for energy generation the biogenic carbon is oxidized to carbon dioxide and released back into the atmosphere.

This European Standard provides a calculation method to quantify the amount of atmospheric carbon dioxide based on that biogenic carbon content.

The information can also be used to estimate the potential benefits associated with carbon storage in wood and wood-based products; for example, by building designers in the early stages of the building design process. It also provides the basis for that information as required by product category rules and the development of EPDs.

EN 16485, *Round and sawn timber - Environmental Product Declarations - Product category rules for wood and wood-based products for use in construction*, addresses the aspects of wood and wood-based products as required for life-cycle assessment.

This European Standard can also be used in the context of the work of other CEN committees, e.g. CEN/TC 112, CEN/TC 124, CEN/TC 350 and CEN/TC 411.

1 Scope

This European Standard provides a calculation method to quantify the amount of atmospheric carbon dioxide based on the biogenic carbon content of wood.

2 Normative references

Not applicable.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN