

**Flexible sheets for waterproofing - Determination of resistance to ozone - Plastic and rubber sheets for roof waterproofing**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 1844:2013 sisaldab Euroopa standardi EN 1844:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 1844:2013 consists of the English text of the European standard EN 1844:2013.
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English Version

Flexible sheets for waterproofing - Determination of resistance to  
ozone - Plastic and rubber sheets for roof waterproofing

Feuilles souples d'étanchéité - Détermination de la  
résistance à l'ozone - Feuilles d'étanchéité de toiture  
plastiques et élastomères

Abdichtungsbahnen - Verhalten bei Ozonbeanspruchung -  
Kunststoff- und Elastomerbahnen für Dachabdichtungen

This European Standard was approved by CEN on 28 March 2013.

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## Foreword

This document (EN 1844:2013) has been prepared by Technical Committee CEN/TC 254 “Flexible sheets for waterproofing”, the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.

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.

This document supersedes EN 1844:2001.

This document has been technically and editorially revised in order to correct the ozone concentration.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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

This European Standard is intended for characterisation of plastic and rubber sheets as manufactured or supplied before use. This test method relates exclusively to products or to their components where appropriate, and not to waterproofing membrane systems composed of such products and installed in the works.

This test is intended to be used in conjunction with European Standards for plastic and rubber sheets for waterproofing.

## 1 Scope

This European Standard specifies a method for the determination of the resistance of plastic and rubber sheets for waterproofing to cracking when exposed, under static tensile strain, to air containing a definite concentration of ozone and at a definite temperature without the effects of direct light.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13416, *Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Rules for sampling*

ISO 1431-1, *Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 1: Static and dynamic strain testing*

## 3 Principle

Test specimens are exposed under elongation in a closed chamber, at a defined relative humidity and temperature, to an atmosphere containing ozone. After exposure, the presence or absence of cracks is determined.

## 4 Apparatus

The apparatus used shall be in accordance with ISO 1431-1.

The test chamber shall also be controlled for relative humidity.

## 5 Sampling

Samples shall be taken in accordance with EN 13416.

## 6 Test specimens

Test specimens shall have an undamaged test surface. Ozone resistance shall not be assessed on surfaces that have been cut or buffed. Comparisons of different materials are only valid if the cracking is assessed on surfaces of similar finish produced by the same method.

Test specimens shall consist of strips of not less than 10 mm width and length not less than 40 mm between the grips before stretching; the thickness is equal to the thickness of the sheets.

The ends of the test specimen held in the grips may be protected with an ozone resistant lacquer. Care shall be taken in selecting a lacquer to ensure that the solvent used does not appreciably swell the membrane. Silicone grease shall be used. Alternatively, the test specimen may be provided with modified ends, for example by the use of lugs, to enable it to be extended without causing excessive stress concentration and breakage at the grips during ozone exposure. At least three test specimens shall be used.