



International
Standard

ISO 24505-2

**Ergonomics — Accessible design —
Part 2:
Colour combinations for people with
colour deficiency and low vision**

Ergonomie — Conception accessible —

*Partie 2: Combinaisons de couleurs pour les personnes atteintes
de daltonisme et de malvoyance*

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 5, *Ergonomics of the physical environment*.

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Introduction

Among people with visual disabilities, a considerably large number of people, especially male people due to a genetic reason, have colour deficiency of various types, and have difficulties identifying and discriminating colours in their daily life. A number of people also suffer from low visual abilities, and are clinically classified as having "low vision". These people can also have deteriorated colour vision and can experience confusion around some colours. As such, they can have problems with obtaining important public information such as warning signs and displays that use mainly colour to convey the message.

ISO 24505-1 provides a method for creating conspicuous colour combinations that are discriminable or differentiated by people with no colour deficiency, but taking into account age-related changes in human colour vision with the aim of presenting better colour combinations to older people. Based on this methodology and basic colour vision data for people with visual disabilities, it is possible and required to establish a method to create colour combinations for people with colour deficiency and low vision to solve their problems in seeing coloured signs and displays.

Within this document, colours are consistently described using the Munsell Colour System. This is a colour order system recommended for use by the International Commission on Illumination.^[1]

The selection of colours and their combinations for the specific use for safety conform to ISO 3864-1.

This document adopts the guidance on accessibility presented in ISO/IEC Guide 71 and design guidelines presented in ISO/TR 22411.

This document is based on the method prescribed in ISO 24505-1, but focuses specifically on data concerning fundamental colours for people with visual disabilities.

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