

SIA 197/2:2004 Civil Engineering



REGISTERED STANDARD OF THE SWISS STANDARDS ASSOCIATION

Replaces together with the Standards SIA 197 and 197/1 Sections 1 and 2 of the Standard SIA 198, Edition 1993

Projektierung Tunnel – Strassentunnel Projet de tunnels – Tunnels routiers Progettazione di gallerie – Gallerie stradali

Design of Tunnels Road Tunnels



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Text in figures is normally not translated. The German original is used instead.

FOREWORD

The previous Standard SIA 198 *Underground Construction* (1993) dealt mainly with regulations concerning execution; design was only briefly mentioned.

The present Standards

SIA 197 Design of Tunnels – Basic Principles
 SIA 197/1 Design of Tunnels – Railway Tunnels
 SIA 197/2 Design of Tunnels – Road Tunnels

close this gap. They are directed towards design engineers. Also addressed are clients (owners and operators) and those involved in site supervision and construction work.

SIA 197 presents the basic principles to be taken into consideration in the design of traffic tunnels, irrespective of the actual purpose (railways or roads). This includes the various aspects of safety and environmental impact. It also includes the regulations dealing with the design of structures executed underground following the SIA Structural Standards. The special features that need be considered in the case of road and rail tunnels are covered in the two specialists' Standards SIA 197/1 and SIA 197/2.

In order to simplify application, the three Standards have the same structure up to the titles of the 3rd level. This frequently leads, on the other hand, to the omission of text with only a cross-reference to the other Standard(s).

The regulations for the execution of underground structures are dealt with as before in the Standard SIA 198 *Underground Structures – Execution.*

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BUWAL Federal Office for the Environment (FOEN)

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Acceptance and coming into force

The central committee for Standards and Regulations accepted the present SIA 197/2 on 26/08/2004. It comes into force on 01/10/2004.

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