

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

Projets de tunnels – Bases générales
Progettazione di gallerie – Basi generali
Projektierung Tunnel – Grundlagen

Design of Tunnels

Basic Principles

197

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FOREWORD

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

The present codes:

- 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 the execution of construction works.

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

In order to simplify application, the three codes exhibit 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 code(s).

The regulations for the execution of underground structures are dealt with as before in the code SIA 198.

Committee for SIA 197

Abbreviations of the organisations represented in the Committee SIA 197

ASTRA Bundesamt für Strassen (Federal Office of Roads)

BAV Bundesamt für Verkehr (Federal Office of Transportation)

BUWAL Bundesamt für Umwelt, Wald und Landschaft (Federal Office of the Environment)

Members of the Commission SIA 197 *Design of Tunnels*

		Representative of
President	Dr. François Vuilleumier, Ing. civ. dipl. EPF/SIA, Lausanne	Consultant engineer
Members	Dr. Ernst Berger, dipl. Bauing. ETH/SIA, Mühlethurnen Alfred Brügger, dipl. Bauing. ETH/SIA, Chêne-Bougeries Andreas Hofer, dipl. Bauing. ETH/SIA, Bern Martin Känzig, dipl. Bauing. ETH/SIA, Bern Pierre Michel, Ing. civ. dipl. ETH/SIA, Sion Willy Ritz, Ing. HTL, Kastanienbaum Alex Sala, dipl. Bauing. FH, Regensdorf Peter Testoni, dipl. Bauing. ETH/SIA, Wabern Peter Theiler, dipl. Bauing. ETH/SIA, Luzern Dr. Hans-Jakob. Ziegler, phil. nat. Geologe, Frauenkappeln	BUWAL Contractor ASTRA BAV Consultant engineer Contractor Consultant engineer BAV Contractor Consultant engineer
Expert	Erwin Beusch, dipl. Bauing. ETH/SIA, Ennetbaden	Client
Co-opted on Section 7	Christian Amstad, dipl. Bauing. ETH/SIA, Zollikerberg Dr. Ulrich Vollenweider, dipl. Bauing. ETH/SIA, Uerikon	Client Consultant engineer

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Acceptance and coming into force

The central committee for codes and regulations accepted the present code SIA 197 on 26 August 2004.

It comes into force on 01/10/2004.

It replaces together with the codes 197/1 and 197/2 Sections 1 and 2 of the code SIA 198 *Untertagbau* of 1993.

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