



Technical Specification

ISO/TS 21056

Recycled aggregate concrete — Additional provisions and guidance for specification, performance, production and execution

*Béton de granulats recyclés — Dispositions et recommandations
supplémentaires pour la spécification, la performance, la
production et l'exécution*

**First edition
2025-08**

Itch Standards
(standards.itch.ai)
Document Preview

[ISO/TS 21056:2025](https://standards.itch.ai/catalog/standards/iso/91a6bffa-0be9-4bd2-a662-5e98ef469ae0/iso-ts-21056-2025)

<https://standards.itch.ai/catalog/standards/iso/91a6bffa-0be9-4bd2-a662-5e98ef469ae0/iso-ts-21056-2025>

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO/TS 21056:2025

<https://standards.iteh.ai/catalog/standards/iso/91a6bffa-0be9-4bd2-a662-5e98ef469ae0/iso-ts-21056-2025>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

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

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Symbols and abbreviated terms	3
5 Constituent materials	3
5.1 Requirements	3
5.1.1 Recycled coarse aggregate	3
5.1.2 Recycled fine aggregate	3
5.1.3 Other constituent materials	3
5.2 Quality inspection of recycled aggregate	4
5.3 Storage and transportation of recycled aggregate	4
6 Performance of recycled aggregate concrete	4
6.1 Consistence	4
6.2 Mechanical property	4
6.2.1 Strength	4
6.2.2 Elastic modulus	5
6.3 Drying shrinkage and creep	5
6.4 Carbonation resistance	5
6.5 Permeability	5
6.6 Chloride resistance	6
6.7 Thermal parameters	6
6.8 Alkali-silica reactivity	6
7 Mix proportion of recycled aggregate concrete	6
7.1 General	6
7.2 Determination of target compressive strength	6
7.3 Determination of water content for recycled aggregate concrete	7
7.4 Determination of cementitious material content	8
7.5 Determination of coarse and fine aggregate content	8
8 Production of recycled aggregate concrete	8
8.1 Preparation	8
8.2 Mixing recycled aggregate concrete	8
9 Delivery and transportation of recycled aggregate concrete	8
9.1 Delivery of ready-mixed fresh concrete	8
9.2 Transportation of ready-mixed fresh concrete	9
10 Execution of recycled aggregate concrete	9
10.1 Pumping	9
10.2 Casting and curing	9
Annex A (informative) Application guideline of recycled aggregate concrete	10
Annex B (informative) Method for determining w/c ratio of recycled aggregate concrete	11
Bibliography	13

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 71, *Concrete, reinforced concrete and pre-stressed concrete*, Subcommittee SC 3, *Concrete production and execution of concrete structures*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO/TS 21056:2025

<https://standards.iteh.ai/catalog/standards/iso/91a6bffa-0be9-4bd2-a662-5e98ef469ae0/iso-ts-21056-2025>