
Testing of concrete —
Part 5:
Density and water penetration depth

Essais du béton —

Partie 5: Caractéristiques du béton durci autres que la résistance



Reference number
ISO 1920-5:2018(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

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
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Determination of density of hardened concrete	1
4.1 General.....	1
4.2 Apparatus.....	2
4.3 Test specimens.....	2
4.4 Procedures.....	2
4.4.1 General.....	2
4.4.2 Mass of as-received specimen.....	2
4.4.3 Mass of water-saturated specimen.....	3
4.4.4 Mass of oven-dried specimen.....	3
4.4.5 Volume obtained by water displacement.....	3
4.4.6 Volume, using actual measurements.....	4
4.4.7 Volume, using checked designated dimensions.....	4
4.4.8 Test result.....	4
5 Determination of water penetration under pressure	6
5.1 Principle.....	6
5.2 Apparatus.....	6
5.3 Test specimen.....	8
5.4 Procedure.....	8
5.4.1 Preparation and conditioning of the test specimen.....	8
5.4.2 Application of water pressure.....	8
5.4.3 Examination of specimen.....	8
5.5 Test result.....	9
6 Test report	9
6.1 General.....	9
6.2 Test report for density.....	9
6.3 Test report for water penetration depth.....	10
Annex A (informative) Precision for the method of determination of the density	11
Annex B (informative) Example of test reports	12
Bibliography	15