

DIN 3764-1:2024-12 (E)

Compression seals made of elastomer for sealing or covering joints in concrete and masonry - Part 1: Round profiles

Contents	Page
Foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions.....	6
4 Form and dimensions	7
5 Material	7
5.1 Base polymer	7
5.2 Material properties	7
6 Testing	10
6.1 Test piece preparation	10
6.2 Tensile strength at break and elongation at break.....	10
6.3 Hardness	10
6.4 Compression stress.....	10
6.5 Compression set	10
6.6 Compression stress relaxation	10
6.7 Testing resistance to water penetration	10
6.8 Water absorption	10
6.9 Testing after exposure.....	10
6.9.1 General	10
6.9.2 Wastewater (EF 1), groundwater (EF 2), drinking water (EF 3)	11
6.9.3 Sea water (EF 4)	11
6.9.4 Ozone loads (EF 5)	11
7 Installation and connections	11
7.1 General	11
7.2 T-connections and intersections.....	13
8 Designation	14
9 Marking	14
Annex A (informative) Table of exposure classes for base polymers.....	16
Annex B (informative) Application examples — Sealing joints with a compression seal with a round profile.....	17
Annex C (informative) Marking example — Nameplate.....	19
Annex D (normative) Determining compression stress.....	20
D.1 Principle	20
D.2 Test apparatus	20
D.3 Preparation of test pieces.....	21
D.4 Test procedure	21
D.5 Calculation and expression of results.....	21
Annex E (informative) Testing resistance to water penetration with simultaneous support.....	22
E.1 Principle.....	22
E.2 Test apparatus	22
E.3 Test piece.....	23

E.4	Test procedure	23
E.4.1	Preparation and conditioning of test piece.....	23
E.4.2	Test procedure	24
E.5	Evaluation and documentation of results	24
E.6	Test report.....	24
	Bibliography	25

Figures

Figure 1	— Installation diagram	12
Figure 2	— Tacking.....	12
Figure 3	— Glued joint.....	13
Figure 4	— Tension-free installation.....	13
Figure 5	— Cutting the profile to length	13
Figure 6	— Installation in longitudinal direction on the transverse profile with compression	14
Figure B.1	— Internal compression seal with support	17
Figure B.2	— External compression seal without support.....	18
Figure D.1	— Compression apparatus.....	20
Figure E.1	— Example of a test set-up for testing resistance to water penetration.....	23

Tables

Table 1	— Tolerances	7
Table 2	— Material properties, requirements and characteristics	8
Table 3	— Exposure, area of application and requirements.....	9
Table 4	— Joint widths and required seal diameter.....	11
Table A.1	— Informative exposure table.....	16