

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