

ISO/TR 16475:2011-08 (E)

Guidelines for the repair of water-leakage cracks in concrete structures

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	2
3	Terms and definitions	2
4	Conditions of water-leakage cracks	3
4.1	Types of water-leakage cracks	3
4.2	Environmental conditions of water-leakage cracks	3
5	Performance requirements for repair materials	5
5.1	Performance requirements for chemical conditions	5
5.2	Performance requirements for physical (mechanical) conditions	5
6	Grout materials for repair	6
6.1	Acrylic grouts (water-based acrylic gel grout)	6
6.2	Cementitious grouts (water-based mixture of cement grout)	7
6.3	Hydrophilic epoxy resin grout	7
6.4	Polyurethane grouts	8
6.5	Synthetic rubber polymerised gel grout	8
6.6	Other material	8
7	Procedures applied to select the appropriate repair materials	8
7.1	Selection process of repair materials (grouts)	8
7.2	Test for performance requirements	9
8	Execution of different types of repair methods	11
8.1	Grouting injection methods	11
8.2	Injection method for reforming a waterproofing layer	13
9	Performance assessments of repaired structures	13
9.1	Inspection of repairs	13
9.2	Evaluation of repairs	14
10	Data collection (record keeping)	14
Bibliography		15