

DIN EN 16473:2015-03 (E)

Firefighters helmets - Helmets for technical rescue

Contents		Page
Foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4	Physical requirements	7
4.1	Materials	7
4.2	Projections	7
4.3	Retention system	7
4.4	Accessories and non-integral additional protective devices	8
4.5	Visors	8
5	Performance requirements	8
5.1	Extent of coverage	8
5.2	Shock absorption	8
5.2.1	Crown impact	8
5.2.2	Lateral impacts (front, side, rear)	8
5.3	Protection against high speed particles	8
5.4	Penetration resistance	8
5.5	Retention system effectiveness	8
5.6	Retention system strength	9
5.7	Flame resistance	9
5.7.1	Helmet shell	9
5.7.2	Retention system	9
5.7.3	Accessories and non-integral additional protective devices	9
5.8	Lateral crushing	9
5.9	Thermal resistance	9
5.10	Field of vision	10
5.11	Electrical properties	10
5.11.1	Conductive headform	10
5.11.2	Surface insulation	10
5.12	Resistance to contact with liquid chemicals	10
5.13	Practical performance	10
5.13.1	General	10
5.13.2	Requirements	11
6	Test methods	11
6.1	Sampling and helmet adjustment	11
6.1.1	Sampling	11
6.1.2	Helmet adjustment	11
6.2	Visual inspection	11
6.3	Conditioning	11
6.3.1	General	11
6.3.2	Cleaning and disinfection	11
6.3.3	Ultraviolet (UV) ageing	12
6.3.4	Solvent conditioning	12
6.3.5	'Thermal plus' conditioning	12
6.3.6	'Thermal minus' conditioning	12
6.3.7	Wet conditioning	12

6.4	Extent of coverage	12
6.4.1	Equipment	12
6.4.2	Samples	12
6.4.3	Test method	12
6.5	Shock absorption	13
6.5.1	General	13
6.5.2	Crown impact	13
6.5.3	Lateral impacts (front, side, rear)	13
6.6	Protection against high speed particles	13
6.7	Penetration resistance	14
6.8	Retention system effectiveness	14
6.9	Retention system strength	14
6.10	Flame resistance	14
6.10.1	Helmet shell and items	14
6.10.2	Helmet retention system components	14
6.11	Lateral crushing	14
6.11.1	Principle	14
6.11.2	Procedure	14
6.12	Thermal resistance	15
6.13	Field of vision	15
6.14	Electrical properties	15
6.14.1	Preconditioning	15
6.14.2	Conductive headform test	15
6.14.3	Surface insulation test	15
6.15	Resistance to contact with liquid chemicals	15
6.16	Practical performance testing	15
6.16.1	Test subjects	15
6.16.2	Procedure	16
6.16.3	Test report	17
7	Marking	17
8	Information to be supplied by the manufacturer	18
Annex A (normative) Conditioning and testing schedule		20
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC		22