

DIN EN 17353:2020-11 (E)

Protective clothing - Enhanced visibility equipment for medium risk situations - Test methods and requirements

Contents		Page
European foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4	Types and minimum area requirements	9
4.1	Types	9
4.2	Minimum area requirements	10
5	Design requirements	11
5.1	Size designation	11
5.2	Type A	11
5.2.1	General	11
5.2.2	Visibility from all sides	11
5.3	Type B	12
5.3.1	General	12
5.3.2	Type B1 - Free hanging devices	12
5.3.3	Type B2 - Equipment for limbs	12
5.3.4	Type B3 - Equipment for the torso or the torso and limbs	12
5.4	Type AB	13
6	Material requirements	13
6.1	Requirements for non-fluorescent material, fluorescent material and combined performance material	13
6.1.1	Colour performance requirements of new material	13
6.1.2	Colour after Xenon test	15
6.1.3	Colour fastness of fluorescent material and all non-fluorescent material layers after test exposure	15
6.2	Dimensional change of fluorescent material and non-fluorescent material	16
6.3	Photometric and physical performance requirements for the separate performance and combined performance materials	16
6.3.1	Retroreflective performance requirements of new material	16
6.3.2	Type B1 - Free hanging devices	17
6.3.3	Type B2, B3 and AB - removable or permanently applied materials or devices	17
6.4	Retroreflective performance requirements after test exposure	18
6.4.1	General	18
6.4.2	Separate performance material	19
6.4.3	Combined performance material	19
6.4.4	Orientation sensitive materials	19
7	Test methods	19
7.1	Sampling and conditioning	19
7.2	Determination of colour	19
7.3	Method of determination of retroreflective photometric performance	20
7.3.1	General	20
7.3.2	Type B1 devices	20
7.3.3	Type B2 and B3 and Type AB devices or garments	20
7.4	Test exposure of retroreflective material	20

7.4.1	Abrasion	20
7.4.2	Folding at cold temperatures	21
7.4.3	Exposure to temperature variation	21
7.4.4	Rainfall	21
7.4.5	Free fall test	21
7.4.6	Influence of water (water immersion)	21
7.5	Ageing	21
7.5.1	General	21
7.5.2	Washing	22
7.5.3	Dry cleaning	22
8	Marking	22
9	Information supplied by the manufacturer	23
	Annex A(informative) Examples of garments or devices according to types and classes	24
	Annex B(informative) Examples of different types of equipment	26
	Annex C(informative) Examples on how to determine visibility from all sides for Type A garments .	27
	Annex D(informative) Possible designs for the placement of fluorescent material on garments	28
	Annex E(informative) Examples of Type B2 and Type B3 garment	29
	Annex ZA(informative) Relationship between this European Standard and the essential requirements of Regulation 2016/425 aimed to be covered	31
	Bibliography	32