

DIN EN 14179-1:2016-12 (E)

Glass in building - Heat soaked thermally toughened soda lime silicate safety glass - Part 1: Definition and description

Contents		Page
European foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Glass products	8
5	Manufacturing processes	8
5.1	General	8
5.2	Toughening process	9
5.3	Heat soak process cycle	9
6	Heat soak process system	10
6.1	General	10
6.2	Oven	10
6.3	Glass support	10
6.4	Glass separation	10
6.5	Calibration	11
7	Fracture characteristics	12
8	Dimensions and tolerances	12
8.1	Nominal thickness and thickness tolerances	12
8.2	Width and length (sizes)	13
8.3	Flatness	15
9	Edge and / or surface work, holes, notches and cut-outs	23
9.1	Warning	23
9.2	Edge working of glass for toughening	23
9.3	Profiled edges	24
9.4	Round holes	24
9.5	Holes / others	27
9.6	Notches and cut-outs	27
9.7	Shaped panes	27
10	Fragmentation test	27
10.1	General	27
10.2	Dimensions and number of test specimens	27
10.3	Test procedure	27
10.4	Assessment of fragmentation	28
10.5	Minimum values from the particle count	29
10.6	Selection of the longest particle	30
10.7	Maximum length of longest particle	30
11	Other physical characteristics	30
11.1	Optical distortion	30

11.2	Anisotropy (iridescence)	30
11.3	Thermal durability	30
11.4	Mechanical strength	31
11.5	Classification of performance under accidental human impact	31
12	Marking	31
Annex A (normative) Heat soak process system calibration test		32
A.1	Calibration criteria	32
A.2	Loading of oven and position for glass surface temperature measurement	32
A.3	Procedure	33
A.4	Records	33
A.5	Interpretation of the calibration test	34
Annex B (informative) Alternative method for the measurement of roller wave distortion		39
B.1	Apparatus	39
B.2	Method	39
B.3	Limitations	40
B.4	Alternative use of apparatus	40
Annex C (informative) Examples of particle count		41
Bibliography		43