ISO 28278-1:2011-12 (E)

Glass in building - Glass products for structural sealant glazing - Part 1: Supported and unsupported monolithic and multiple glazing

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Symbols and abbreviated terms 6

5 Principle 8

6 Required characteristics of glass products 10
6.1 Appropriate glass products 10
6.2 Dimensional tolerances 11
6.3 Glass shapes 12
6.4 Corners, notches and holes 12

7 Verification of the suitability of glass products for use in SSG systems when exposed to ultra-violet (UV) radiation 13
7.1 General 13
7.2 Insulating glass unit (IGU) 13
7.3 Laminated glass or monolithic glass -- Situation 3 (see Figure 3) 15
7.4 Assessment of the adhesion between the sealant and the glass 15

8 Design 16
8.1 Calculation of the thickness of the glass 16
8.2 Calculation of the height of the outer sealant of the IGU for supported and unsupported glazing 16
8.3 Calculation of the height of the outer sealant of the IGU for unsupported glazing 20

Annex A (informative) Assembly requirement 21

Annex B (normative) Structural and/or ultra-violet (UV) -resistant sealant (for use with structural sealant glazing and/or IGUs with exposed seals) 26

Annex C (normative) Evaluation of tests results 42

Annex D (normative) Shear at 23 °C -- Test method 46

Annex E (normative) Factory production control (FPC) requirements for sealants 48

Annex F (normative) Outer seal of an IGU -- Category differentiation 53

Annex G (normative) Formation of bubbles 56

Annex H (informative) Sealing, structural bonding and UV resistance schematic illustrations 57

Annex I (normative) Initial testing of the bonding of sealant to a non-glass substrate 60

Bibliography 62