

T.W.R. Commercial Ltd

TWR Commercial

Architectural Requirements

External Aluminium Windows

TWR Commercial Ltd.

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Architectural Requirements

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1. Windows will incorporate Titon trickle vents and a head extension to house these.
2. Top glazed windows will be fitted with restrictor stays and have 100mm restriction in secure areas.
3. Top glazed windows will be fitted with restrictor stays and have 200mm restriction in non-secure areas.
4. Slide windows will be fitted with restrictor bars and be restricted to 100mm in secure areas.
5. Slide windows will be fitted with restrictor bars and be restricted to 200mm in non-secure areas.
6. Superglide (Picu) windows will be fitted with restrictor bars and be restricted to 100mm in secure areas.
7. Slide windows will be fitted with non-locking anti ligature Dortrend handles in secure areas.
8. Slide windows will be fitted with key locking handles in non-secure areas.
9. Superglide (picu) windows will be fitted with non-locking anti ligature Dortrend handles in secure areas.
10. Slide windows will be fitted with key turn detachable centre mullion bolts in secure areas.
11. Superglide (Picu) windows will be fitted with key turn concealed shoot bolts in secure areas.
12. Glass will be 8mm toughened glass inner pane and 6.8mm laminated outer pane to all windows except Picu.
13. Glass to Picu will be 8mm toughened inner pane and 8mm toughened outer pane with internal blinds in the Superglide system.
14. Glass to be 50/25 brilliant high performance to all exterior panes to meet performance requirements.

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External Aluminium Windows
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Test Certificates

Scope

This specification defines materials, construction finish and hardware for the “Alitherm” 55 Polyamide casement window, which conforms generally with BS 4873 specification for aluminium alloy windows. Windows described in this specification are suitable for both the replacement windows into the existing building and installation into new building work.

Materials

Aluminium: AlMgSi 0.5 Type 6060/6063 T5 in condition F22 (according to NBN P21-001 and DIN 1725)

Sealings: E.P.D.M. according to DIN 7863, TV 110, NFP 85301, ISO 3994. Tested and approved according to an artificial ageing test of “Plexi glass” combined with vulcanised rubber.

Co-extruded profiles: according to DIN 7863, TV 110, BFP 85301, ISO 3994, tested and approved according to an artificial ageing test of “Plexi glass” combined with vulcanised rubber.

Thermal break: polyamide strips PA 6.6.25% reinforced with glass fibre.

Radiation barrier: polyamide strips PA 6.6.25% reinforced with glass fibre.

Performance

Test Report 3823, date 11.06.03. Windows having been tested in accordance with the requirements of BS6375 Pt 1 have achieved the following classification for weather tightness:-

Air permeability Class C 600pa

Water Tightness 600pa

Wind Resistance 2400pa

	General
Product Type	Windows
Material	Aluminium Polyamide
Dual Colour	✓
NBS available	✓
	Performance
Max width	1400
max height	1500
Max weight	50
Weather suitability	★ ★ ★ ★ ★
Acoustic suitability	★ ★ ★ ★ ★
Thermal suitability	★ ★ ★ ★ ★
Min Glazing	28
Max glazing	28
Security rating	★ ★ ★ ★ ★
	Certificates
BS6375 Pt 1	✓
BS6375 pt2	✓
BS7950	✓
BS4873	✓
Kitemark	✓
	Jointing
Mechanical	✓

Test Certificates

Alitherm 55 Casement (Impact Resistance)	as per attachment
Alitherm 55 BS6375 Part 1 (Weather) (BRE)	as per attachment
Alitherm 55 BS6375 Part 1 (Weather) (Schlegel)	as per attachment
Alitherm 55 BS7950 (Security) (BSI)	as per attachment
Alitherm 55 Internal Beaded BS7950 (Security) (BSI)	as per attachment
Kitemark KM81543	as per attachment
Kitemark KM81580	as per attachment

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Test Certificates

Slide

Scope

For replacement of opening windows, where the rotating frame forms an hindrance.
For dividing constructions as verandas, and for creating space in a large passage.
For dividing a terrace and a accommodation in houses and apartments.

Materials:

Extruded out of aluminium-alloy AlMgSi 0,5 F22 according to DIN 1725.
Tolerance according to DIN17618.

Finishing:

Electrostatic powder coating: according to the guidelines of APA-Qualicoat in most of the current RAL-colours.
Possible to colour in wood structure to imitate different woods (Powder coated according to Qualicoat).
All coatings will be delivered with a certificate of guarantee for 15 years.
Anodisation: in satin or bronze colours with E.E.W.A./EURAS-Qualanod quality label.
Thermal break: The profiles consist of 2 aluminium extrusions which are separated from one another by polyamide strips PA 6.6.25 reinforced with glass fibre. A gluing thread, rolled and pushed in together with the thermal break profile, ensures a strong adhesion after melting and flowing, when the profiles are heated in the hardening furnace.

Details:

Built-in depth: outer frame 51 mm
Sealings: with extruded EPDM rubbers and PP brushes.
With or without rails.
Principle of glazing: the glass is wrap around glazing, laterally and vertically, and is held in place by EPDM sealings.
Glazing: from 6-9mm and from 20 to 24 mm.
Hardware: SOBINCO
Max. sash weight: 120kg
Wheels: in Ertalon.
Several variations possible: 2-, 3-, 4- and 6-parted.

	General
Product Type	Windows
Material	Aluminium Polyamide
Dual Colour	✓
Thermally broken	✓
NBS available	✓
	Performance
Max width	6500
max height	2500
Max weight	120
Weather suitability	★ ★ ★ ★
Acoustic suitability	★ ★ ★
Thermal suitability	★ ★ ★
Min Glazing	6
Max glazing	24
Security rating	★ ★ ★
	Building suitability
Medium duty	✓

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Test Certificates

Slide

Slide (weather) 2 pane

as per attachment

Superglide

Applications:

To separate terrace areas and living quarters in houses and flats.
Separations for conservatories looking out into the garden and to create space in a passage way.
Glazing possible up to 38mm.

Materials:

Extruded out of aluminium-alloy AlMgSi 0,5 F22 according to DIN 1725.
Tolerance according to DIN17618.

Finishing:

Electrostatic powder coating: according to the guidelines of APA-Qualicoat in most of the current RAL-colours.
Possible to colour in wood structure to imitate different woods (Powder coated according to Qualicoat).
All coatings will be delivered with a certificate of guarantee for 15 years.
Anodisation: in satin or bronze colours with E.E.W.A./EURAS-Qualanod quality label.
Thermal break: The profiles consist of 2 aluminium extrusions which are separated from one another by polyamide strips PA 6.6.25 reinforced with glass fibre. A gluing thread, rolled and pushed in together with the thermal break profile, ensures a strong adhesion after melting and flowing, when the profiles are heated in the hardening furnace.

Details:

Built-in depth: outer frame 116 mm.
Sealings: with PP-brushes
Glazing: from 4 to 38 mm.
Wheels: ALIPLAST
Hardware: SOBINCO
Max. sash weight: 200 kg
Wheels: PVC
Double rail: Aluminium
Different combinations: 2-, 3-, 4- and 6-parted

Performance level according to STS 52.0:

Air transmission: PA3
Mechanical resistance to wind: PV3
Watertightness: PE3

Performance level according to UEATC:

Air transmission: A3
Mechanical resistance to wind: V3
Watertightness: E3

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Test Certificates

	General
Product Type	Doors
Material	Aluminium Polyamide
Dual Colour	✓
Thermally broken	✓
	Performance
Max width	7000
max height	3000
Max weight	200
Weather suitability	★ ★ ★ ★ ★
Acoustic suitability	★ ★ ★ ★ ★
Thermal suitability	★ ★ ★ ★
Min Glazing	4
Max glazing	38
security rating	★ ★ ★ ★ ★
	Certificates
SKG security test	✓
	Locking options
Single	✓
Multi-point	✓
	Jointing
Crimp	✓
Mechanical	✓
	Building suitability
light duty	✓
medium duty	✓
heavy duty	✓
	Patio options
Single track	✓
Two track	✓
Three track	✓

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Test Certificates

Superglide (UP TO 3M) BS EN 1026 1027 12211 (218 154) (Weather) (BRE) as per attachment

Superglide BS EN 1026 1027 12211 (219 404) (Weather) (BRE) as per attachment

Test Certificates

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