

# T.W.R. Commercial Ltd

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OEM guidance to profiles

TWR Commercial Guidance  
**Profiles**

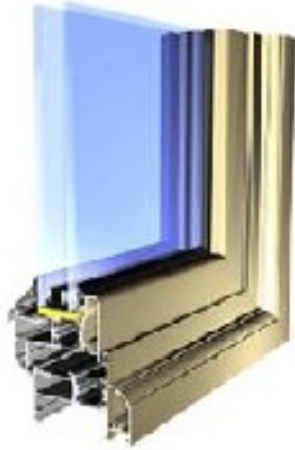
**TWR Commercial Ltd.**

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55mm System proven to Kitemark standards. A choice of profiles and hardware enable this product to be used in a wide range of commercial situations.



### **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.

### **Finishing**

- Electrostatic Powder coating: according to the guidelines of A..P.A.-Qualicoat in most of the current RAL-colours.
- The composed profiles (with thermal break) can be coated with different inner and outer colours (single colour).
- Anodisation in satin or bronze colours with EWAA/EURAS-Qualinod quality label.
- Glass shall conform to the requirements of BS 6262 and part N of the Building Regulations for Thickness and Type.
- Profiles and gaskets will accommodate double glazed units of thickness 28mm

## Construction

- Frame members are mitre cut at 45 degrees and faces coated with a suitable gap sealer using internal extruded aluminium corner cleats together with a gluing compound.
- Members are abutted and securely jointed by mechanical or crimped means.
- Transoms and mullions are end milled to shape and mechanically secured to frame members by means of self tapping screws driven in screw receptacles in the profile or by means of internal cleats.
- All mechanical joints shall be sealed against entry of water.
- All fixings used in construction shall be either stainless steel, aluminium alloy or other suitable corrosion resistant materials.

## Hardware

- All opening vents are hung on concealed stainless steel variable angled friction stays and fitted with espagnolette type locking handles.
- To limit the opening restrictor stays shall be fitted.

## Glazing

- Aluminium clip in beads and flexible gaskets inside and out meeting the requirements of BS 6262, Code of Practice for Glazing for Buildings.

## 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

## Product Range

- Windows are manufactured to required design to within maximum limitations.

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### **Slide**

Wrap around glazed, thermal, horizontal sliding system with no encroachment of opening beyond depth of frame. Suitable for medium commercial applications.



### **Applications:**

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: 60kg

Wheels: in Ertalon.

Several variations possible: 2-, 3-, 4- and 6-parted.

## Superglide

Superior thermal insulated and strong dual hollow aluminium horizontal sliding system with internal beads. Suitable for light / medium / heavy duty commercial applications and domestic areas requiring extreme performance.



### 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.

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**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

