SOLEAL
A NEW GENERATION
OF WINDOWS

A PERFECTLY HARMONIOUS SYSTEM

Designed to seamlessly complement the SOLEAL system, this new range combines both technical and aesthetic innovations. It broadens Technal’s existing offer with non thermal break windows and patio doors. With a 55 mm (fixed frame) and 65 mm (opening frame) module, this range fulfils architectural requirements thanks to the adjustable glazing and the large-sized frames.

The SOLEAL non thermal break window has many applications as well as exceptional weather performances and wind resistance. Patio doors are also available with flat thresholds. Compatible with other products of SOLEAL range, this window can be set in the same installation environment and use the same hardware. Its opulent and high-quality appearance make it the ideal window for residential sector, commercial and public buildings. Furthermore the SOLEAL non thermal break window is the perfect solution for external joinery in warmer weather conditions or temperate climate, and for inside offices partitioning.
SOLEAL / UNIVERSAL WINDOW

MULTIPLE CONFIGURATIONS
- Window and patio door.
- 1 and 2 leaves.
- Fixed lights.
- Inward openings: 1 leaf, tilt/turn, and bottom-hung.
- Outward opening: top-hung window.
- Installation of composite frames possible by integrating or stacking on bottom or fixed side lights.

LARGE DIMENSIONS
- Window dimension up to H 2250 x L 1400 mm (1 leaf).
- Glazing infills up to 42 mm.
- Inward opening up to 100 kg.
- Turn/tilt opening up to 130 kg.
- Top hung window up to 140 Kg.

LOCKING SYSTEMS
- Exclusive Technal-designed handles are available for all configurations to ensure style consistency regardless of opening systems.

AESTHETICS
- A visible opening frame of 87.5 mm for a stylish and high-quality finish.
- Concealed or visible drainage for fixed frames or transoms.
- Architraves available in different shapes and styles.

MANUFACTURING AND INSTALLATION
- Handle with gear box.
- Simple to manufacture: one corner cleat per frame.
- T-connectors for front installation.
- Installation with or without sill, flashing or architrave.
- Same installation environment and hardware as for the SOLEAL thermal break range.

ACCESSIBILITY
- Flat threshold available on patio door.
SOLEAL 55

/ A CONTEMPORARY LOOK

SIMPLE AND HIGH-QUALITY

Visible opening
Concealed drainage
Straight lines

A WIDE RANGE OF LOCKING SYSTEMS

Stainless steel handle
Exclusive Technal-designed handle
Exclusive Technal-designed handle with lock

Classic handle
Handle with gear box

Architect: Séquences
Photographer: Sylvain Mille
CROSS-SECTIONS

OPEN-IN
1 AND 2-LEAF WINDOW

OPEN-IN
1 AND 2-LEAF PATIO DOOR WITH LOCK
CROSS-SECTIONS

OPEN-OUT
1 LEAF TOP-HUNG WINDOW

OPEN-IN
1 LEAF PATIO DOOR WITH FLAT THRESHOLD
### WEATHER TIGHTNESS PERFORMANCES A.E.V. (Air, Water, Wind)

<table>
<thead>
<tr>
<th>Application (High x Width)</th>
<th>Test no. according to European standards</th>
<th>Air permeability</th>
<th>Water permeability</th>
<th>Wind resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 leaf tilt/turn window H 1600 x W 1200 mm</td>
<td>FCBA N° 404/15/193-3</td>
<td>Class 4</td>
<td>Class E1200</td>
<td>Class C5</td>
</tr>
<tr>
<td>2 leaves patio door H 2250 x W 1955 mm</td>
<td>FCBA N° 404/15/230-2</td>
<td>Class 4</td>
<td>Class E1650</td>
<td>Class B5</td>
</tr>
</tbody>
</table>

Test results performed according to the European Standard:
- Air permeability test according to EN - 1026, classification according to EN - 12207.
- Water permeability tests according to EN -1027, classification according to EN - 12208.
- Wind resistance test according to EN- 12210, classification according to EN - 12211.

### WEATHER TIGHTNESS PERFORMANCES A.E.V. (Air, Water, Wind)

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<tr>
<td>1 leaf tilt/turn window H 1600 x W 1200 mm</td>
<td>SOCOTEC R15-05-04</td>
<td>0.043 L/sm to 75 Pa</td>
<td>0.121 L/sm² to 75 Pa</td>
<td>1200 Pa no water penetration</td>
</tr>
<tr>
<td>2 leaves patio door H 2250 x W 1955 mm</td>
<td>SOCOTEC R17-07-02</td>
<td>0.034 L/sm to 75 Pa</td>
<td>0.091 L/sm² to 75 Pa</td>
<td>1500 Pa no water penetration</td>
</tr>
<tr>
<td>1 leaf top hung window H 1500 mm x W 1500 mm</td>
<td>SOCOTEC R15-10-04</td>
<td>0.055 L/sm to -75 Pa</td>
<td>0.142 L/sm² to 75 Pa</td>
<td>1500 Pa no water penetration</td>
</tr>
</tbody>
</table>

Test results performed according to ASTM Standard:
- Air Permeability test according to ASTM E283-04 (2012).
- Water permeability tests according to ASTM E331-00 (2009) and ASTM E547-00 (2009).
- Wind resistance test according to ASTM E330 / E330M -14.
CONFIGURATIONS

EXTERNAL VIEW DIAGRAMS

OPEN-IN

- Fixed
- Bottom-hung 1 leaf
- Turn/Tilt or Tilt/Turn 2 leaves

OPEN-OUT

- Top Hung window
- Composite window

MATERIALS AND PARTS

High quality materials and parts are used to minimise maintenance and ensure long-term performance.

- The aluminium profiles are extruded from EN AW 6060 according to following standards: EN 12020, EN 573-3, EN 515 and EN 775-1 to 9 alloys.
- Fittings are cast from EN 12844 compliant Zamak 5, non-corrosive hardware class 4.
- Screws are made from stainless steel.

FINISHES AND COLOURS

A wide range of finishes and colours is available to meet individual project requirements, enhancing existing buildings and offering architects and designers greater design freedom.

- Natural anodised in accordance with EN 12373:2001.
- Polyester powder coating finishes in a wide range of colours in accordance with "QUALICOAT" instructions.
- SOLEAL is also available in coated finishes with exclusive Technal colours for a stylish and contemporary look.