



Technical description

System LINEAL THERM 77 is one of six from LINEAL series and it represents aluminium profile system with thermal break, specially designed for manufacturing of windows and doors with frame depth of 77mm. System is designed to satisfy all contemporary demand for energy efficiency, as well as all other requirements for safe and comfortable living and working environment. Special attention was addressed to selection of materials that for the thermal break within the profile. This way, maximal isolation values of $U_f \approx 1,34W/m^2K$, or $U_w \approx 0,93W/m^2K$, were achieved.

- Aluminium profiles were manufactured in Tehnomarket's own extrusion factory. The raw material used is primary aluminium alloy AlMgSi0.5 (AA 6063 and AA 6060) with minimum tensile strength of 210KN/mm².
- 39mm wide Polyamide stripes (PA 6,6 with 25% glass fibers) connect inner and outer aluminium parts into finished profiles, and beside functioning as a mechanical bond they also provide a thermal break. Guaranteed shearing force for profiles connected with polyamide stripes is strictly controlled during production.
- Exceptional thermic performance was achieved with foam - filled chambers in polyamide area, and with special, dual/material coextruded central gasket.
- Insulating performance of the complete system was confirmed through thermal performance testing. At the same time, wind load, air and water permeability and sound insulation were tested as well.
- System is compatible with both EURO 1 and EURO 16mm groove standards for hardware installation.
- System allows glass packages from 23 to 55mm with EPDM gaskets that feature integrated anti-blowing barrier.
- The triple sealing between frame and sash is achieved with three separate EPDM gaskets resistant to UV light.
- Corner joining with extruded patent or press clips is achieved through all profile chambers, thus guaranteeing secure and precise joints and finished element geometry.
- Drainage of condensed and incidental water is regulated via free flat surfaces in profile chambers, while ventilated outer chamber features optimal width of 20mm.
- Basic outer frame width of 65mm allows for an ideal mounting surface for optimal placement of mosquito net and roll-shutter's guides. Internal width of the frame provides an ideal space for tape coiler.