TM 102HI - WINDOW SYSTEM WITH THERMAL INSULATION





TM 102HI - SYSTEM FEATURES

YAWAL TM 102HI System is dedicated to energy-saving and passive buildings.

This system will work in public utility buildings and in residential buildings. It is a well-developed system of aluminium profiles used to manufacture modern types of windows, doors and display windows that require high thermal insulation properties. The modern construction of the sash, with insulator angled with respect to the frame, provides beneficial distribution of forces within the profile.

Due to the above, manufacturing of highly durable profiles was possible, and that, in turn, allowed for creating constructions of large dimensions and significant weight. As a part of this system, we offer wide range of glazing and the possibility of installing all types of two-chamber or threechamber glass panes available on the market.





ADVANTAGES OF THE SYSTEM

- best thermal insulation,
- possibility of creating large dimension structures,
- possibility of using full range of fittings available at the market: surface fittings ALU, groove type PCV, hidden hinges, handles with spindles of any shape, stainless handles,
- excellent level of energy-saving and very high water-tightness due to innovative central seal construction,
- possibility of making balcony door with low threshold,
- modern design of lock profiles in combination with the new gaskets allows for creating one uninterrupted surface of aluminium and gaskets,
- additional wind insulation due to application of gasket at the contact point of glazing bead and profile,
- possibility of combination with other Yawal systems.

To meet the growing expectations concerning thermal insulation properties, Yawal has developed TM 102HI system, dedicated for passive and energy -saving buildings - Uw from $0.4 \text{ W/(m}^2\text{K})$.

TM 102HI meets the highest requirements concerning durability, quality, and aesthetics of created objects. Tight and durable constructions limit cold air access to the inside of the building during winter and protect against excessive heat in summer.

THE SYSTEM IS CHARACTERIZED BY A RIGID STRUCTURE

TECHNICAL PARAMETERS - TM 102HI			
Air permeability	class 4 (600 Pa)		
Water tightness	class AE1800 (1800 Pa	class AE1800 (1800 Pa)	
Heat transfer coefficient	$U_f = 0,45 \div 0,9 \text{ W/m}^2 \text{K} \text{ acc. to PN-EN ISO } 10077-2$		
Acoustic insulation	39-48 dB acc. to PN-EN ISO 140-3		
Anti-theft protection	RC2, RC3, RC4		
Wind load resistance	class C5 (2000 Pa)		
SYSTEM CHARACTERISTICS			
Window structural depth	Frame profile	102 mm	
	Sash profile	111,4 mm	
Acceptable thickness of infills	Frame profile	28÷86 mm	
	Sash profile	28÷92 mm	
Acceptable leaf dimensions	Width	1600 mm	
	Height	3000 mm	
Max leaf weight		300 kg	