

## TM 77HI - WINDOW AND DOOR SYSTEM WITH THERMAL INSULATION



TM  
77  
HI

### HIGH THERMAL INSULATION PROPERTIES

#### TM 77HI - SYSTEM FEATURES

TM 77HI system is a safe and innovative solution that provides excellent parameters of thermal and acoustic insulation, safety, and protection against wind and water.

The separators between aluminium profiles ensure great thermal insulation properties.

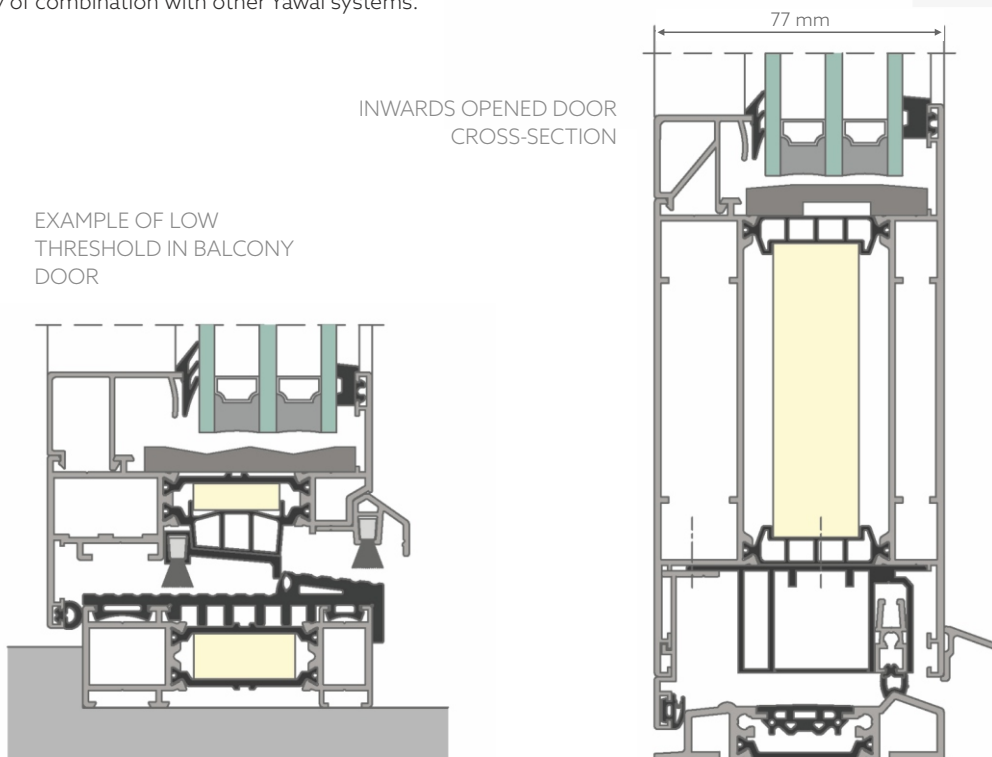
Dedicated thermal insulators act as thermal insulation, in combination with infill of high thermal insulation properties.

Photo: Corner House, Warsaw  
Design: Biuro Designów Kazimierski i Ryba Sp. J., Warsaw  
Aluminium manufacturer: BUMA FACTORY, Cracow



## ADVANTAGES OF THE SYSTEM

- possibility of heating costs reduction,
- possibility of creating large-surface constructions with modern arrangement of facades and interiors
- easy to match with fittings elements and control elements,
- possibility of creating modern constructions of various shapes and configurations,
- possibility of achieving heat transfer factor as good as  $U_f=0,8-1,5 \text{ W/m}^2\text{K}$  thanks to using unique thermal insulation solutions,
- possibility of making balcony door with low threshold,
- possibility of combination with other Yawal systems.



## TECHNICAL PARAMETERS - TM 77HI

	TM 77HI windows	TM 77HI doors
Air permeability	class 4 acc. to PN 12207	class 4 acc. to PN-EN 12207
Water tightness	E1650 acc. to PN-EN 12208	E900 acc. to PN-EN 12208
Heat transfer coefficient	$U_f=0,8\div1,4 \text{ W/m}^2\text{K}$ acc. to PN-EN ISO 10077-2	$U_f=0,9\div1,5 \text{ W/m}^2\text{K}$ acc. to PN-EN ISO 10077-2
Acoustic insulation	39-48 dB acc. to PN-EN ISO 140-3	36-45 dB acc. to PN-EN ISO 140-3
Anti-theft protection	RC2, RC3, RC4	RC2, RC3

## SYSTEM CHARACTERISTICS

Window structural depth	Frame profile	77 mm
	Sash profile	86,4 mm
Door structural depth	Frame profile	77 mm
	Sash profile	77 mm
Glass pane thickness for windows	Frame profile	19÷61 mm
	Sash profile	28÷67 mm