



FINEO is much more than glass technology: it is pure comfort. This groundbreaking vacuum insulating glass not only delivers amazing energy performance, it also combines exceptional thermal insulation with unprecedent durability.

In its Hybrid version, FINEO is assembled in a double glazing unit. This insulating glazing, where FINEO is used as one pane of a double glazing, leads to unprecedent thermal and acoustic performances.

FINEO Hybrid is the solution for renovation or new construction in urban area, where high acoustic insulation is required. It is also ideal for continental climate, where temperature can drop drastically during winter.

FINEO Hybrid exists in many different compositions, 5 of them are presented below. Additional solutions can be provided based on projects requirements. FINEO Hybrid allows unreached level of flexibility.



What's so special about it?	What does it mean for you?
Sleek and aesthetical design	<ul> <li>No vacuum evacuation port</li> <li>20 mm grid micro-pillars<sup>(1)</sup></li> </ul>
Outstanding thermal insulation	■ U-value ≤ 0.5 W/(m2.K)
Exceptional noise reduction	<ul><li>Increased soundproofing</li><li>Reduced traffic noise</li></ul>
Ideal for renovation or new construction	<ul> <li>Suitable for retrofitting(*) into existing windows</li> <li>Compatible with new standards of framing systems</li> </ul>
High versatility	<ul><li>Adapted to all potential projects requirements</li><li>No need for compromise</li></ul>
Sustainable investment	<ul> <li>Long life expectancy</li> </ul>
Ecologic solution	<ul> <li>Produced in Europe, close to projects where it is installed</li> <li>Low energy consumption, lower emissions</li> </ul>

<sup>(\*)</sup> retrofitting: replace the existing glass with a FINEO glazing, fully preserving the initial window frame (provided the frame is in good condition and can support 20-30mm thick glazing solutions).

## LESS IS MORE

## LIGHT AND ENERGY PERFORMANCE(2)

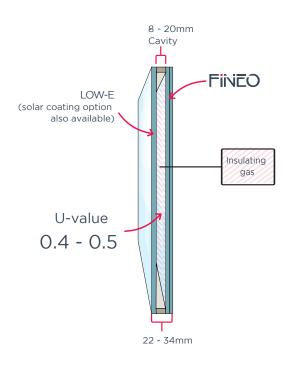
FINEO (	Total tickness [mm]	EN 410				EN 673
		LT [%]	LR ext [%]	LR int [%]	g [-]	Ug [W/ (m².K)]
FINEO Hybrid 6mm 1.0 / 10mm 90% Ar / FINEO 10	25.7	66.4	20.0	19.6	42.6	0.47
FINEO Hybrid 8mm 1.0 / 10mm 90% Ar / FINEO 10	27.7	65.8	19.7	19.6	41.9	0.47
FINEO Hybrid 8mm 1.0 / 12mm 90% Ar / FINEO 10	29.7	65.8	19.7	19.6	42.0	0.46
FINEO Hybrid 8mm 1.0 / 15mm 90% Ar / FINEO 10	32.7	65.8	19.7	19.6	42.2	0.44
FINEO Hybrid 8mm V72 / 10mm 90% Ar / FINEO 10	27.7	62.3	16.5	19.2	33.1	0.47

## ACOUSTIC PERFORMANCE (3)

FINEO (	EN ISO 10140			
	Rw [C;Ctr] [dB]	Rw+Ctr [dB]		
FINEO Hybrid 6mm 1.0 / 10mm 90% Ar / FINEO 10	38 (-2;-3)	35		
FINEO Hybrid 8mm 1.0 / 10mm 90% Ar / FINEO 10	38 (-2;-3)	35		
FINEO Hybrid 8mm 1.0 / 12mm 90% Ar / FINEO 10	38 (-2;-4)	34		
FINEO Hybrid 8mm 1.0 / 15mm 90% Ar / FINEO 10	39 (-2;-4)	35		
FINEO Hybrid 8mm V72 / 10mm 90% Ar / FINEO 10	38 (-2;-3)	35		

## **PRODUCTION FEASIBILITY**

Dimensions	Maximum <sup>(4)</sup>	1.5m x 2.5m or 1.6m x 2.4m	
Difficusions	Minimum	0.2m x 0.2m	
Shapes	Available in an important number of shapes		
Laminated safety glass	Available		
	Option: patterned or monumental glass		



- Missing or misplaced micro-pillars can occur. These misplaced or missing micro-pillars do not jeopardize the aesthetics (under normal obser-(1) vation conditions), the function, the performances nor the mechanical integrity over time of FINEO.
- $These \ data \ are \ calculated \ using \ spectral \ measurements \ compliant \ with \ standards \ EN\ 410 \ and \ ISO\ 9050\ (1990). \ The \ Uglass-value \ is \ calculated \ using \ spectral \ measurements \ compliant \ with \ standards \ EN\ 410 \ and \ ISO\ 9050\ (1990). \ The \ Uglass-value \ is \ calculated \ using \ spectral \ measurements \ compliant \ with \ standards \ EN\ 410 \ and \ ISO\ 9050\ (1990). \ The \ Uglass-value \ is \ calculated \ using \ spectral \ measurements \ compliant \ with \ standards \ end \ of \ spectral \ of \ spectra$ according to standard EN 673. Emissivity is measured as per standards EN 673 (Annex A) and EN 12898.
- (3) Estimated values.
- (4) The maximum dimensions depend on climatic conditions.

