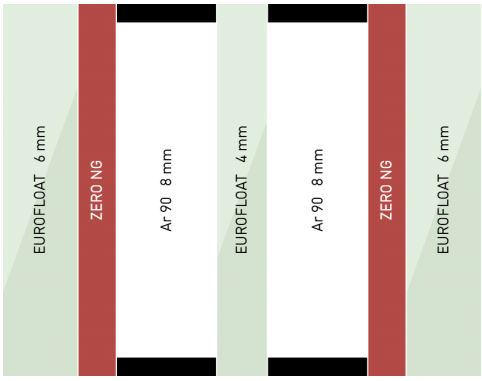
Configuration: **ZERO NG #2 #5 – 6 EF | 8 Ar 90 | 4 EF | 8 Ar 90 | 6 EF**



Tilt angle: **90°**

ZERO NG #2 #5 – 6 EF | 8 Ar 90 | 4 EF | 8 Ar 90 | 6 EF

EUROFLOAT 6 mm, ZERO NG, Ar 90 8 mm, EUROFLOAT 4 mm, Ar 90 8 mm, ZERO NG, EUROFLOAT 6 mm

Optical properties	**EN 410:2011**
Light transmittance (τ_v)	64 %
External light reflectance ($\rho_{v,e}$)	22 %
Internal light reflectance ($\rho_{v,i}$)	22 %
General colour-rendering index (R_a)	94

Energy properties	**EN 410:2011**
Total solar energy transmittance (solar factor) (g)∠	41 %
Shading coefficient (solar factor g / 0.87) (SC)∠	47 %
Secondary internal heat transfer factor (q_i)∠	7 %
Solar direct transmittance (τ_e)	34 %
External solar direct reflectance ($\rho_{e,e}$)	39 %
Internal solar direct reflectance ($\rho_{e,i}$)	39 %
Solar direct absorptance (α_e)	27 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	19 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	3 %
Solar direct absorptance pane 3 ($\alpha_{e,3}$)	5 %
UV-Transmittance (τ_{UV})	14 %
Selectivity (S)∠	1.6

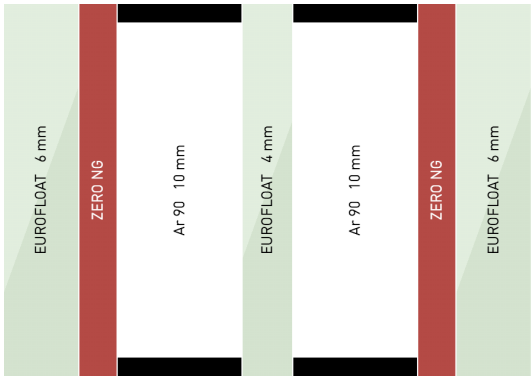
Thermal properties	**EN 673:2024**
Thermal transmittance (U_g)∠	0.9 W/m²K

Mechanical properties	
External bullet resistance ($EN1063_{hr,e}$)	NPD
Internal bullet resistance ($EN1063_{hr,i}$)	NPD
External resistance against manual attack (ball) ($EN356_{ball,e}$)	NPD
Internal resistance against manual attack (ball) ($EN356_{ball,i}$)	NPD
External resistance against manual attack (axe) ($EN356_{axe,e}$)	NPD
Internal resistance against manual attack (axe) ($EN356_{axe,i}$)	NPD

Fire resistance	**EN13501-2:2016**
Fire resistance class (EN13501-2)	NPD

Thickness and weight	
Thickness (mm)	32.00 mm
Weight (kg/m²)	40 kg/m²

Configuration: **ZERO NG #2 #5 – 6 EF | 10 Ar 90 | 4 EF | 10 Ar 90 | 6 EF**



Tilt angle: **90°**

ZERO NG #2 #5 – 6 EF | 10 Ar 90 | 4 EF | 10 Ar 90 | 6 EF

EUROFLOAT 6 mm, ZERO NG, Ar 90 10 mm, EUROFLOAT 4 mm, Ar 90 10 mm, ZERO NG, EUROFLOAT 6 mm

Optical properties	**EN 410:2011**
Light transmittance (τ_v)	64 %
External light reflectance ($\rho_{v,e}$)	22 %
Internal light reflectance ($\rho_{v,i}$)	22 %
General colour-rendering index (R_a)	94

Energy properties	**EN 410:2011**
Total solar energy transmittance (solar factor) (g)∠	41 %
Shading coefficient (solar factor g / 0.87) (SC)∠	47 %
Secondary internal heat transfer factor (q_i)∠	7 %
Solar direct transmittance (τ_e)	34 %
External solar direct reflectance ($\rho_{e,e}$)	39 %
Internal solar direct reflectance ($\rho_{e,i}$)	39 %
Solar direct absorptance (α_e)	27 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	19 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	3 %
Solar direct absorptance pane 3 ($\alpha_{e,3}$)	5 %
UV-Transmittance (τ_{UV})	14 %
Selectivity (S)∠	1.6

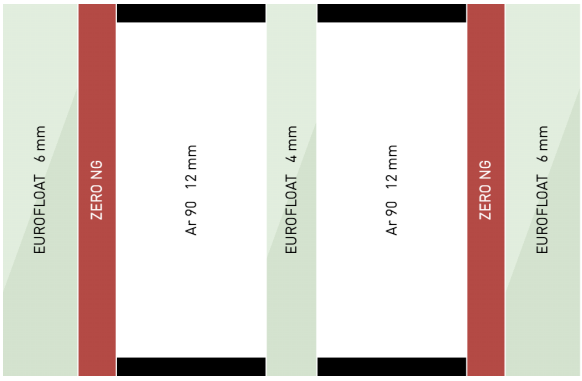
Thermal properties	**EN 673:2024**
Thermal transmittance (U_g)∠	0.8 W/m²K

Mechanical properties	
External bullet resistance ($EN1063_{hr,e}$)	NPD
Internal bullet resistance ($EN1063_{hr,i}$)	NPD
External resistance against manual attack (ball) ($EN356_{ball,e}$)	NPD
Internal resistance against manual attack (ball) ($EN356_{ball,i}$)	NPD
External resistance against manual attack (axe) ($EN356_{axe,e}$)	NPD
Internal resistance against manual attack (axe) ($EN356_{axe,i}$)	NPD

Fire resistance	**EN13501-2:2016**
Fire resistance class (EN13501-2)	NPD

Thickness and weight	
Thickness (mm)	36.00 mm
Weight (kg/m²)	40 kg/m²

Configuration: **ZERO NG #2 #5 – 6 EF | 12 Ar 90 | 4 EF | 12 Ar 90 | 6 EF**



Tilt angle: **90°**

ZERO NG #2 #5 – 6 EF | 12 Ar 90 | 4 EF | 12 Ar 90 | 6 EF

EUROFLOAT 6 mm, ZERO NG, Ar 90 12 mm, EUROFLOAT 4 mm, Ar 90 12 mm, ZERO NG, EUROFLOAT 6 mm

Optical properties	**EN 410:2011**
Light transmittance (τ_v)	64 %
External light reflectance ($\rho_{v,e}$)	22 %
Internal light reflectance ($\rho_{v,i}$)	22 %
General colour-rendering index (R_a)	94

Energy properties	**EN 410:2011**
Total solar energy transmittance (solar factor) (g)∠	41 %
Shading coefficient (solar factor g / 0.87) (SC)∠	47 %
Secondary internal heat transfer factor (q_i)∠	7 %
Solar direct transmittance (τ_e)	34 %
External solar direct reflectance ($\rho_{e,e}$)	39 %
Internal solar direct reflectance ($\rho_{e,i}$)	39 %
Solar direct absorptance (α_e)	27 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	19 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	3 %
Solar direct absorptance pane 3 ($\alpha_{e,3}$)	5 %
UV-Transmittance (τ_{UV})	14 %
Selectivity (S)∠	1.6

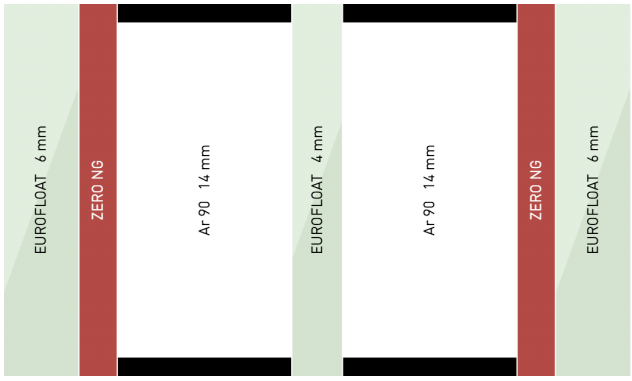
Thermal properties	**EN 673:2024**
Thermal transmittance (U_g)∠	0.7 W/m²K

Mechanical properties	
External bullet resistance ($EN1063_{hr,e}$)	NPD
Internal bullet resistance ($EN1063_{hr,i}$)	NPD
External resistance against manual attack (ball) ($EN356_{ball,e}$)	NPD
Internal resistance against manual attack (ball) ($EN356_{ball,i}$)	NPD
External resistance against manual attack (axe) ($EN356_{axe,e}$)	NPD
Internal resistance against manual attack (axe) ($EN356_{axe,i}$)	NPD

Fire resistance	**EN13501-2:2016**
Fire resistance class (EN13501-2)	NPD

Thickness and weight	
Thickness (mm)	40.00 mm
Weight (kg/m²)	40 kg/m²

Configuration: **ZERO NG #2 #5 – 6 EF | 14 Ar 90 | 4 EF | 14 Ar 90 | 6 EF**



Tilt angle: **90°**

ZERO NG #2 #5 – 6 EF | 14 Ar 90 | 4 EF | 14 Ar 90 | 6 EF

EUROFLOAT 6 mm, ZERO NG, Ar 90 14 mm, EUROFLOAT 4 mm, Ar 90 14 mm, ZERO NG, EUROFLOAT 6 mm

Optical properties	**EN 410:2011**
Light transmittance (τ_v)	64 %
External light reflectance ($\rho_{v,e}$)	22 %
Internal light reflectance ($\rho_{v,i}$)	22 %
General colour-rendering index (R_a)	94

Energy properties	**EN 410:2011**
Total solar energy transmittance (solar factor) (g)∠	41 %
Shading coefficient (solar factor g / 0.87) (SC)∠	47 %
Secondary internal heat transfer factor (q_i)∠	7 %
Solar direct transmittance (τ_e)	34 %
External solar direct reflectance ($\rho_{e,e}$)	39 %
Internal solar direct reflectance ($\rho_{e,i}$)	39 %
Solar direct absorptance (α_e)	27 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	19 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	3 %
Solar direct absorptance pane 3 ($\alpha_{e,3}$)	5 %
UV-Transmittance (τ_{UV})	14 %
Selectivity (S)∠	1.6

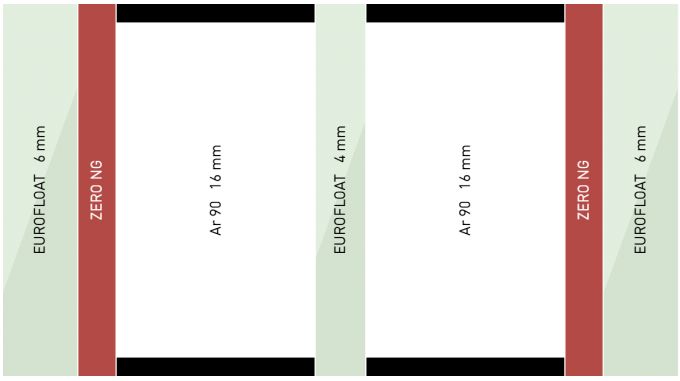
Thermal properties	**EN 673:2024**
Thermal transmittance (U_g)∠	0.6 W/m²K

Mechanical properties	
External bullet resistance ($EN1063_{hr,e}$)	NPD
Internal bullet resistance ($EN1063_{hr,i}$)	NPD
External resistance against manual attack (ball) ($EN356_{ball,e}$)	NPD
Internal resistance against manual attack (ball) ($EN356_{ball,i}$)	NPD
External resistance against manual attack (axe) ($EN356_{axe,e}$)	NPD
Internal resistance against manual attack (axe) ($EN356_{axe,i}$)	NPD

Fire resistance	**EN13501-2:2016**
Fire resistance class (EN13501-2)	NPD

Thickness and weight	
Thickness (mm)	44.00 mm
Weight (kg/m²)	40 kg/m²

Configuration: **ZERO NG #2 #5 – 6 EF | 16 Ar 90 | 4 EF | 16 Ar 90 | 6 EF**



Tilt angle: **90°**

ZERO NG #2 #5 – 6 EF | 16 Ar 90 | 4 EF | 16 Ar 90 | 6 EF

EUROFLOAT 6 mm, ZERO NG, Ar 90 16 mm, EUROFLOAT 4 mm, Ar 90 16 mm, ZERO NG, EUROFLOAT 6 mm

Optical properties	**EN 410:2011**
Light transmittance (τ_v)	64 %
External light reflectance ($\rho_{v,e}$)	22 %
Internal light reflectance ($\rho_{v,i}$)	22 %
General colour-rendering index (R_a)	94

Energy properties	**EN 410:2011**
Total solar energy transmittance (solar factor) (g)∠	41 %
Shading coefficient (solar factor g / 0.87) (SC)∠	47 %
Secondary internal heat transfer factor (q_i)∠	7 %
Solar direct transmittance (τ_e)	34 %
External solar direct reflectance ($\rho_{e,e}$)	39 %
Internal solar direct reflectance ($\rho_{e,i}$)	39 %
Solar direct absorptance (α_e)	27 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	19 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	3 %
Solar direct absorptance pane 3 ($\alpha_{e,3}$)	5 %
UV-Transmittance (τ_{UV})	14 %
Selectivity (S)∠	1.6

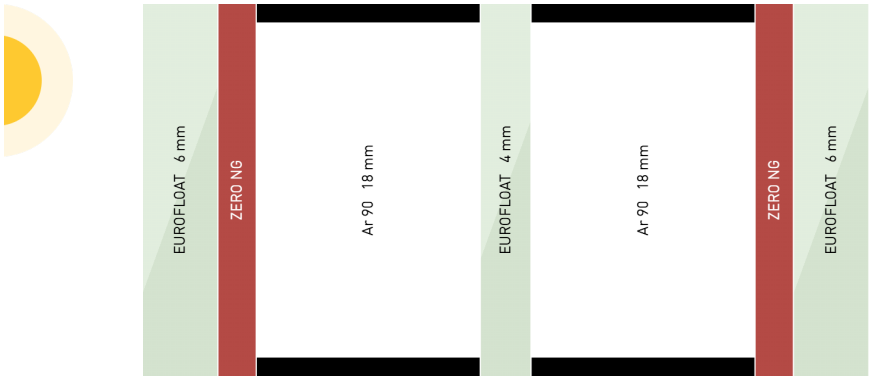
Thermal properties	**EN 673:2024**
Thermal transmittance (U_g)∠	0.5 W/m²K

Mechanical properties	
External bullet resistance ($EN1063_{hr,e}$)	NPD
Internal bullet resistance ($EN1063_{hr,i}$)	NPD
External resistance against manual attack (ball) ($EN356_{ball,e}$)	NPD
Internal resistance against manual attack (ball) ($EN356_{ball,i}$)	NPD
External resistance against manual attack (axe) ($EN356_{axe,e}$)	NPD
Internal resistance against manual attack (axe) ($EN356_{axe,i}$)	NPD

Fire resistance	**EN13501-2:2016**
Fire resistance class (EN13501-2)	NPD

Thickness and weight	
Thickness (mm)	48.00 mm
Weight (kg/m²)	40 kg/m²

Configuration: **ZERO NG #2 #5 – 6 EF | 18 Ar 90 | 4 EF | 18 Ar 90 | 6 EF**



Tilt angle: **90°**

ZERO NG #2 #5 – 6 EF | 18 Ar 90 | 4 EF | 18 Ar 90 | 6 EF

EUROFLOAT 6 mm, ZERO NG, Ar 90 18 mm, EUROFLOAT 4 mm, Ar 90 18 mm, ZERO NG, EUROFLOAT 6 mm

Optical properties	**EN 410:2011**
Light transmittance (τ_v)	64 %
External light reflectance ($\rho_{v,e}$)	22 %
Internal light reflectance ($\rho_{v,i}$)	22 %
General colour-rendering index (R_a)	94

Energy properties	**EN 410:2011**
Total solar energy transmittance (solar factor) (g)∠	41 %
Shading coefficient (solar factor g / 0.87) (SC)∠	47 %
Secondary internal heat transfer factor (q_i)∠	7 %
Solar direct transmittance (τ_e)	34 %
External solar direct reflectance ($\rho_{e,e}$)	39 %
Internal solar direct reflectance ($\rho_{e,i}$)	39 %
Solar direct absorptance (α_e)	27 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	19 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	3 %
Solar direct absorptance pane 3 ($\alpha_{e,3}$)	5 %
UV-Transmittance (τ_{UV})	14 %
Selectivity (S)∠	1.6

Thermal properties	**EN 673:2024**
Thermal transmittance (U_g)∠	0.5 W/m²K

Mechanical properties	
External bullet resistance ($EN1063_{hr,e}$)	NPD
Internal bullet resistance ($EN1063_{hr,i}$)	NPD
External resistance against manual attack (ball) ($EN356_{ball,e}$)	NPD
Internal resistance against manual attack (ball) ($EN356_{ball,i}$)	NPD
External resistance against manual attack (axe) ($EN356_{axe,e}$)	NPD
Internal resistance against manual attack (axe) ($EN356_{axe,i}$)	NPD

Fire resistance	**EN13501-2:2016**
Fire resistance class (EN13501-2)	NPD

Thickness and weight	
Thickness (mm)	52.00 mm
Weight (kg/m²)	40 kg/m²

Configuration: **ZERO NG #2 #5 – 6 EF | 20 Ar 90 | 4 EF | 20 Ar 90 | 6 EF**

Tilt angle: **90°**

ZERO NG #2 #5 – 6 EF | 20 Ar 90 | 4 EF | 20 Ar 90 | 6 EF

EUROFLOAT 6 mm, ZERO NG, Ar 90 20 mm, EUROFLOAT 4 mm, Ar 90 20 mm, ZERO NG, EUROFLOAT 6 mm

Optical properties	**EN 410:2011**
Light transmittance (τ_v)	64 %
External light reflectance ($\rho_{v,e}$)	22 %
Internal light reflectance ($\rho_{v,i}$)	22 %
General colour-rendering index (R_a)	94

Energy properties	**EN 410:2011**
Total solar energy transmittance (solar factor) (g)∠	41 %
Shading coefficient (solar factor g / 0.87) (SC)∠	47 %
Secondary internal heat transfer factor (q_i)∠	7 %
Solar direct transmittance (τ_e)	34 %
External solar direct reflectance ($\rho_{e,e}$)	39 %
Internal solar direct reflectance ($\rho_{e,i}$)	39 %
Solar direct absorptance (α_e)	27 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	19 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	3 %
Solar direct absorptance pane 3 ($\alpha_{e,3}$)	5 %
UV-Transmittance (τ_{UV})	14 %
Selectivity (S)∠	1.6

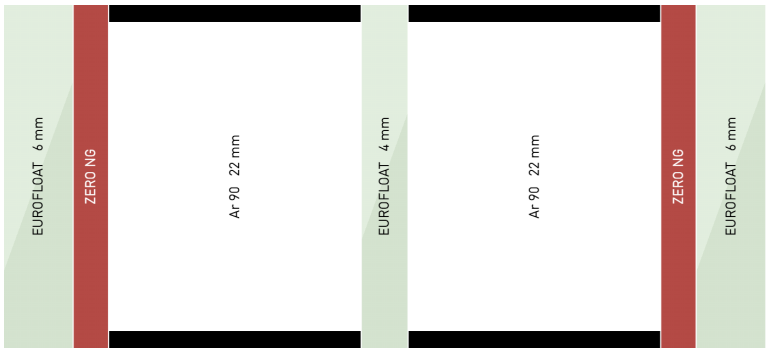
Thermal properties	**EN 673:2024**
Thermal transmittance (U_g)∠	0.5 W/m²K

Mechanical properties	
External bullet resistance ($EN1063_{hr,e}$)	NPD
Internal bullet resistance ($EN1063_{hr,i}$)	NPD
External resistance against manual attack (ball) ($EN356_{ball,e}$)	NPD
Internal resistance against manual attack (ball) ($EN356_{ball,i}$)	NPD
External resistance against manual attack (axe) ($EN356_{axe,e}$)	NPD
Internal resistance against manual attack (axe) ($EN356_{axe,i}$)	NPD

Fire resistance	**EN13501-2:2016**
Fire resistance class (EN13501-2)	NPD

Thickness and weight	
Thickness (mm)	56.00 mm
Weight (kg/m²)	40 kg/m²

Configuration: **ZERO NG #2 #5 – 6 EF | 22 Ar 90 | 4 EF | 22 Ar 90 | 6 EF**



Tilt angle: **90°**

ZERO NG #2 #5 – 6 EF | 22 Ar 90 | 4 EF | 22 Ar 90 | 6 EF

EUROFLOAT 6 mm, ZERO NG, Ar 90 22 mm, EUROFLOAT 4 mm, Ar 90 22 mm, ZERO NG, EUROFLOAT 6 mm

Optical properties	**EN 410:2011**
Light transmittance (τ_v)	64 %
External light reflectance ($\rho_{v,e}$)	22 %
Internal light reflectance ($\rho_{v,i}$)	22 %
General colour-rendering index (R_a)	94

Energy properties	**EN 410:2011**
Total solar energy transmittance (solar factor) (g)∠	41 %
Shading coefficient (solar factor g / 0.87) (SC)∠	47 %
Secondary internal heat transfer factor (q_i)∠	7 %
Solar direct transmittance (τ_e)	34 %
External solar direct reflectance ($\rho_{e,e}$)	39 %
Internal solar direct reflectance ($\rho_{e,i}$)	39 %
Solar direct absorptance (α_e)	27 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	19 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	3 %
Solar direct absorptance pane 3 ($\alpha_{e,3}$)	5 %
UV-Transmittance (τ_{UV})	14 %
Selectivity (S)∠	1.6

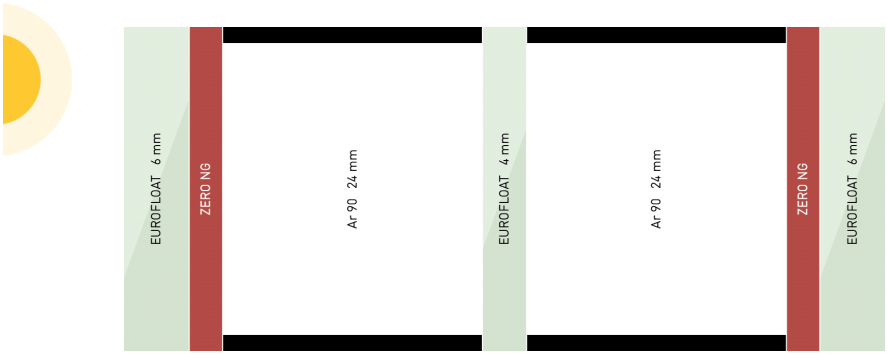
Thermal properties	**EN 673:2024**
Thermal transmittance (U_g)∠	0.5 W/m²K

Mechanical properties	
External bullet resistance ($EN1063_{hr,e}$)	NPD
Internal bullet resistance ($EN1063_{hr,i}$)	NPD
External resistance against manual attack (ball) ($EN356_{ball,e}$)	NPD
Internal resistance against manual attack (ball) ($EN356_{ball,i}$)	NPD
External resistance against manual attack (axe) ($EN356_{axe,e}$)	NPD
Internal resistance against manual attack (axe) ($EN356_{axe,i}$)	NPD

Fire resistance	**EN13501-2:2016**
Fire resistance class (EN13501-2)	NPD

Thickness and weight	
Thickness (mm)	60.00 mm
Weight (kg/m²)	40 kg/m²

Configuration: **ZERO NG #2 #5 – 6 EF | 24 Ar 90 | 4 EF | 24 Ar 90 | 6 EF**



Tilt angle: **90°**

ZERO NG #2 #5 – 6 EF | 24 Ar 90 | 4 EF | 24 Ar 90 | 6 EF

EUROFLOAT 6 mm, ZERO NG, Ar 90 24 mm, EUROFLOAT 4 mm, Ar 90 24 mm, ZERO NG, EUROFLOAT 6 mm

Optical properties	**EN 410:2011**
Light transmittance (τ_v)	64 %
External light reflectance ($\rho_{v,e}$)	22 %
Internal light reflectance ($\rho_{v,i}$)	22 %
General colour-rendering index (R_a)	94

Energy properties	**EN 410:2011**
Total solar energy transmittance (solar factor) (g)∠	41 %
Shading coefficient (solar factor g / 0.87) (SC)∠	47 %
Secondary internal heat transfer factor (q_i)∠	7 %
Solar direct transmittance (τ_e)	34 %
External solar direct reflectance ($\rho_{e,e}$)	39 %
Internal solar direct reflectance ($\rho_{e,i}$)	39 %
Solar direct absorptance (α_e)	27 %
Solar direct absorptance pane 1 ($\alpha_{e,1}$)	19 %
Solar direct absorptance pane 2 ($\alpha_{e,2}$)	3 %
Solar direct absorptance pane 3 ($\alpha_{e,3}$)	5 %
UV-Transmittance (τ_{UV})	14 %
Selectivity (S)∠	1.6

Thermal properties	**EN 673:2024**
Thermal transmittance (U_g)∠	0.5 W/m²K

Mechanical properties	
External bullet resistance ($EN1063_{hr,e}$)	NPD
Internal bullet resistance ($EN1063_{hr,i}$)	NPD
External resistance against manual attack (ball) ($EN356_{ball,e}$)	NPD
Internal resistance against manual attack (ball) ($EN356_{ball,i}$)	NPD
External resistance against manual attack (axe) ($EN356_{axe,e}$)	NPD
Internal resistance against manual attack (axe) ($EN356_{axe,i}$)	NPD

Fire resistance	**EN13501-2:2016**
Fire resistance class (EN13501-2)	NPD

Thickness and weight	
Thickness (mm)	64.00 mm
Weight (kg/m²)	40 kg/m²