高端功能膜 × 解决方案

PREMIUM FILM SOLUTIONS

专业防护 · 舒适空间 · 品质升级



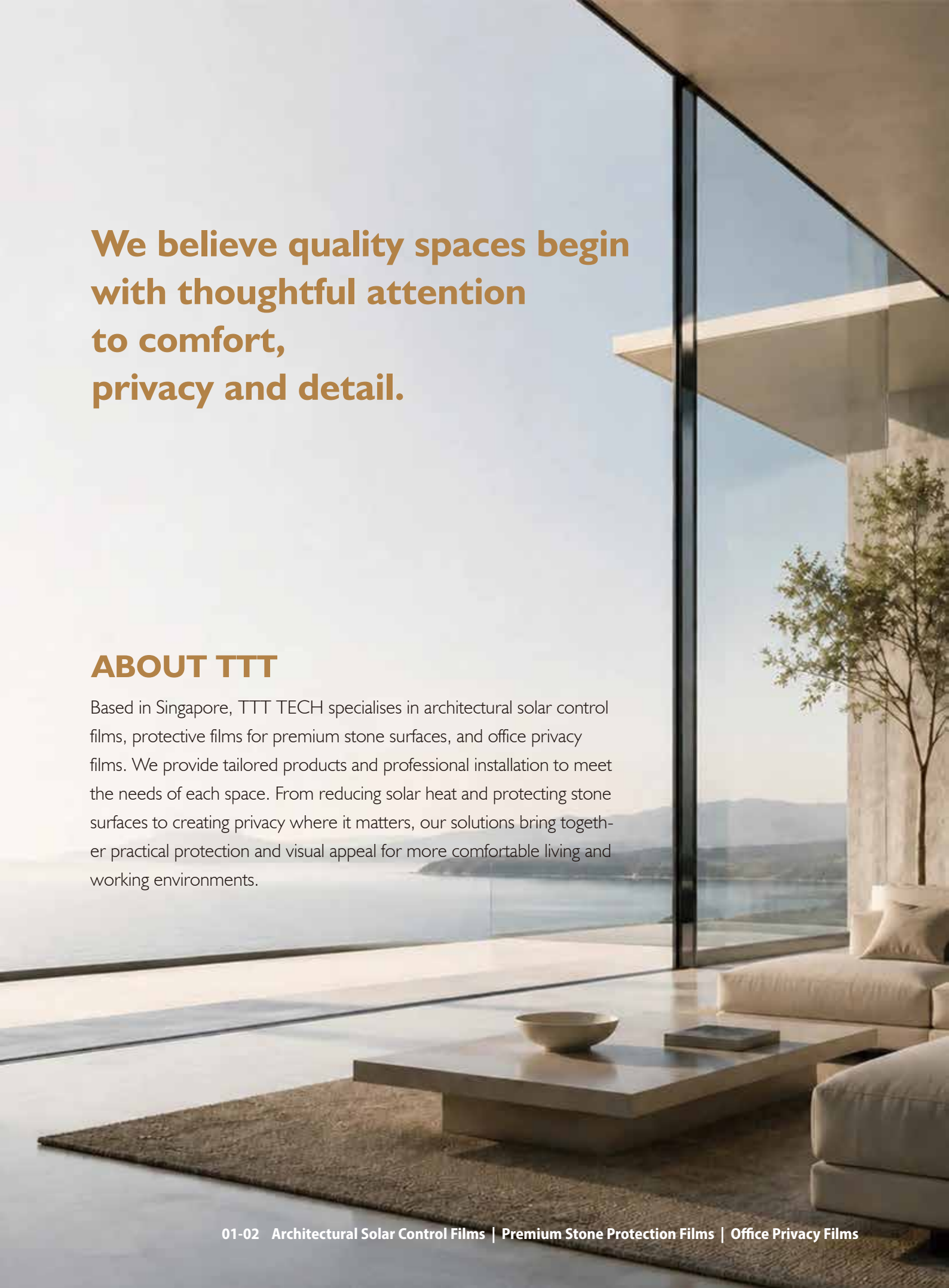
建筑隔热膜 | 高端石材防护膜 | 办公空间隐私膜

TTT TECH PTE. LTD.

Expert Protection
Comfortable Spaces
Elevated Quality

Protecting Every Detail,Enhancing Every Space.

ISO 9001:2015 ISO 14001 IATF 16949



We believe quality spaces begin with thoughtful attention to comfort, privacy and detail.

ABOUT TTT

Based in Singapore, TTT TECH specialises in architectural solar control films, protective films for premium stone surfaces, and office privacy films. We provide tailored products and professional installation to meet the needs of each space. From reducing solar heat and protecting stone surfaces to creating privacy where it matters, our solutions bring together practical protection and visual appeal for more comfortable living and working environments.

TTT TECH PTE. LTD.

A MEMBRANE REDEFINING ARCHITECTURAL GLASS

Make the light more comfortable
Make the space safer



Temperature difference comparison



Before and after applying the film

UV blocking rate

99%

Protecting the skin health of family members

One-way perspective Privacy protection

The inside is not visible from outside.
The outside can be clearly seen from inside.





ENERGY-SAVING AND HEAT INSULATION

Reduce air conditioning energy consumption, maintain constant temperature and comfort



UV PROTECTION

Protect furniture and skin, delay aging and fading



SAFETY AND EXPLOSION-PROOF

Glass does not splash when broken, safeguarding personal safety



LIGHT AND SHADOW AESTHETICS

Anti-glare, controllable privacy, rich decorative expression



EXCEPTIONAL RESILIENCE

Under various climatic conditions, maintain stable optical performance, safety performance and decorative effect



From the intense sun exposure to the temperature fluctuations, it stably guards the glass space of the building.

TTT QUALITY

NATURAL LIGHT CONTROL EXTRA CARE

Reduce harsh direct light, minimize reflections, make the light softer,
and solve the problem of harsh glare from strong light.
The visible light adjustment range is 4.5 - 70%,
and it blocks 99% of ultraviolet rays.
Significantly reduces skin dullness, melanin deposition,
and aging and fading of furniture and floors.

Visible light transmittance	Solar transmittance	UV Blocking rate
70%	61%	99%

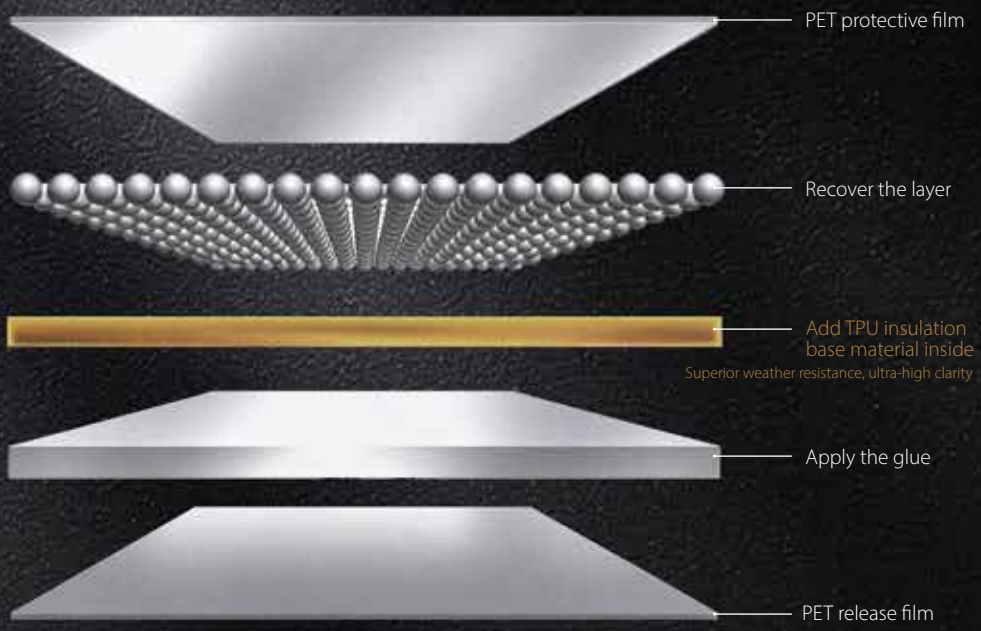
Strong light naturally changes color, making the light softer.
Soft light is clear and transparent, without obstructing the view.



TTT PTE. LTD.

TTT TECH FILM

Upgrade the coating technology to enable TTT heat insulation film to have continuous and uniform heat insulation,
clearer light transmission, and more stable performance.



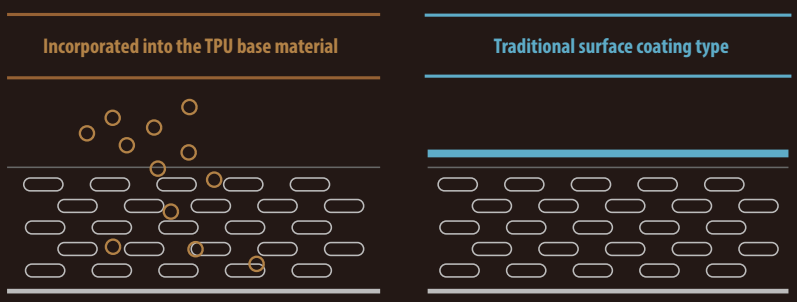
- Upgrade coating technology
- Adding heat insulation granules to the TPU base material
- Multilayer co-extrusion process

High insulation | High definition | More secure



*Adding process to TPU base membrane Reforming TPU heat insulation film

Employ nanoscale super-dispersion technology.
Uniformly disperse the nano-tungsten oxide dopant into the TPU resin,
produce TPU heat insulation masterbatch,
add the directly extruded and stretched TPU heat insulation base film in proportion according to the light transmission and heat insulation requirements.
The performance remains stable and does not deteriorate over time, and the quality is more reliable.



Adding it to the TPU base membrane means uniformly dispersing nano-tungsten oxide into the TPU resin to produce TPU heat insulation masterbatch. This is different from the coating process where heat insulation additives are applied to the repair coating and installation adhesive layer. In this method, the heat insulation additives are directly incorporated into the TPU base material.

TTT PTE. LTD.

MAGNETIC CONTROL DOUBLE-SILVER

THE BUILDING FILM

MAGNETIC CONTROL DOUBLE-SILVER INSULATION FILM

TOP-LEVEL INSULATION, EXPLOSION-PROOF, UV PROTECTION



MAGNETIC CONTROL DOUBLE-SILVER INSULATION FILM

Excellent film, no matter how exposed to the sun, it won't get hot.
Reflective insulation is the real insulation.







A GENUINE SILVER-COATED HEAT INSULATION FILM

The nano-coating and multi-layer magnetic control composite technology can effectively block heat from entering the room, reduce oxidation, and perfectly achieve a balance among thermal insulation efficiency, signal blocking, and product stability.

STRONG COLLABORATION TOP-LEVEL INSULATION

Nano coating reduces oxidation, and the magnetron sputtering process achieves reflective insulation.
Top-level insulation, long-lasting and stable durability, comfortable and energy-efficient

HIGH-DEFINITION UV PROTECTION

Clear and bright, anti-glare, blocks 99.9% of ultraviolet rays to prevent sunburn and tanning, and slows down the aging of furniture.

SUPER DUCTILITY EXPLOSION-PROOF

Optical-grade ultra-tough substrate, thickness increased by 50%, puncture strength enhanced by 200%, stronger impact resistance, explosion-proof protection doubled.

TTT PTE. LTD.

MAGNETIC CONTROL DOUBLE-SILVER

THE BUILDING FILM

LV70

COLOR
LIGHT BLUE

Thickness:3 mil

Warranty:10 years

Excellent film, no matter how exposed to the sun, it won't get hot. Reflective insulation is the real insulation.

膜样区

70	9	99	82	96	54
VLT(%)	VLR(%)	UV(%)	IRR(%)950nm	IRR(%)1400nm	TSER

MAGNETIC CONTROL DOUBLE-SILVER INSULATION FILM



MAGNETIC CONTROL DOUBLE-SILVER

THE BUILDING FILM

LV40

COLOR
NEUTRAL COLOR

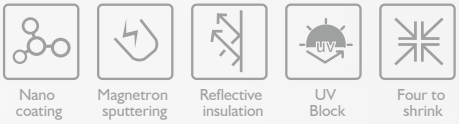
Thickness:3 mil Warranty:10 years

Excellent film, no matter how exposed to the sun, it won't get hot. Reflective insulation is the real insulation.

膜样区

40	9	99	83	95	61
VLT(%)	VLR(%)	UV(%)	IRR(%)950nm	IRR(%)1400nm	TSER

MAGNETIC CONTROL DOUBLE-SILVER INSULATION FILM



TTT PTE. LTD.

CERAMICS ULTRA-HIGH INSULATION

THE CERAMIC FILM

ULTRA-HIGH INSULATION CERAMIC FILM

SUN PROTECTION AND SKINCARE, FULL-WAVEBAND UV RAY BLOCKING, STRONG HEAT INSULATION





阻隔紫外线　　隔热防晒

HIGH-DEFINITION VISION

Clear vision, with everything from near to far being clearly visible. Anti-spy feature, protecting privacy.

STRONG INSULATION

The entire series has an infrared blocking rate of over 90%, effectively preventing heat from entering the room, providing an ultimate cooling experience with a comfortable feeling.



LOWEST TEMPERATURE　　MAXIMUM TEMPERATURE

UV BLOCKING RATE
99.9%
MORE RESISTANT TO AGING

IRR BLOCKING RATE
90%
HEAT INSULATION, COMFORTABLE

SUN PROTECTION
10 YEARS
GOOD STABILITY AND NO FADING

TTT TECH PTE. LTD.

CERAMICS ULTRA-HIGH INSULATION

THE CERAMIC FILM

IRX70

COLOR
LIGHT BLUE

Thickness:3 mil Warranty:8 years

High insulation,
full-band ultraviolet ray blocking,
sun protection and skincare

膜样区

70	8	99	94	99	48
VLT(%)	VLR(%)	UV(%)	IRR(%)950nm	IRR(%)1400nm	TSER

ULTRA-HIGH INSULATION CERAMIC FILM



CERAMICS ULTRA-HIGH INSULATION

THE CERAMIC FILM

IRX35

COLOR
CARBON BLACK

Thickness:3 mil Warranty:8 years

High insulation,
full-band ultraviolet ray blocking,
sun protection and skincare

膜样区

36	5	99	95	99	59
VLT(%)	VLR(%)	UV(%)	IRR(%)950nm	IRR(%)1400nm	TSER

ULTRA-HIGH INSULATION CERAMIC FILM



TTT PTE. LTD.

CERAMICS HIGH-DEFINITION CERAMIC

HD CERAMIC FILM

HIGH-DEFINITION CERAMIC SAFETY FILM

HIGH PERFORMANCE, HIGH CLARITY, CERAMIC MEMBRANE



DENSITY SHOCK PROTECTION TIME ONLINE

Effectively buffer external impacts, prevent explosion, collision and splashing, and avoid the danger of glass fragments.



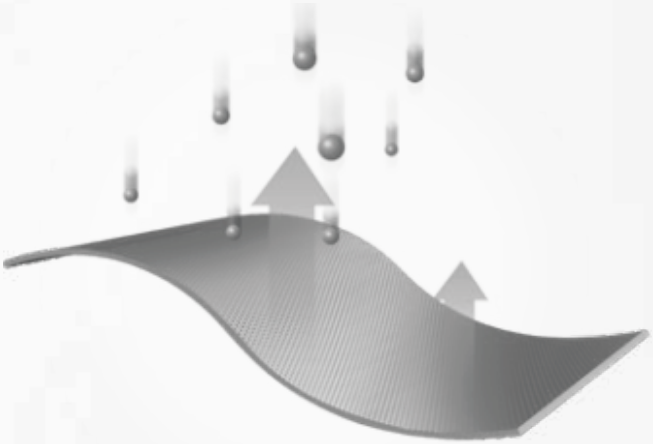
UV Block

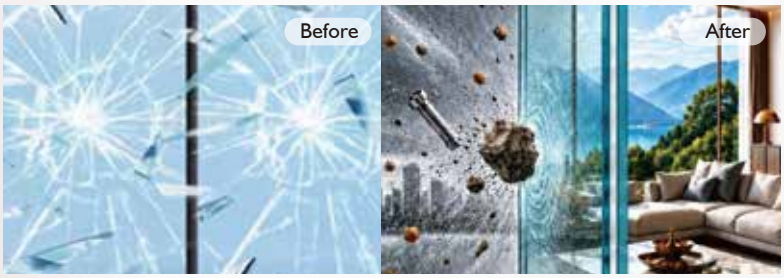


Heat Insulation
Sun Protection



Safety
Shatterproof







TTT PTE. LTD.

CERAMICS HIGH-DEFINITION CERAMIC

HD CERAMIC FILM

IRR80

COLOR
LIGHT BLUE

Thickness:2 mil Warranty:7 years

One-piece molding, higher light transmission, reduced dazzling glare, enhanced impact resistance, and doubled explosion-proof protection.

膜样区

78	8	99	82	90	43
VLT(%)	VLR(%)	UV(%)	IRR(%)950nm	IRR(%)1400nm	TSER

HIGH-DEFINITION CERAMIC SAFETY FILM



SINGLE LAYER CERAMIC FILM

SUN PROTECTION AND SKINCARE, FULL-WAVEBAND UV RAY BLOCKING, STRONG HEAT INSULATION



TTT PTE. LTD.

CERAMICS

SINGLE LAYER CERAMIC

SINGLE LAYER CERAMIC FILM

HS75

COLOR
LIGHT BLUE

Thickness: 1.8 mil Warranty: 5 years

It combines excellent heat insulation, no signal interference, clear vision, and privacy protection features, providing a comfortable and smooth riding experience.

膜样区

78	8	99	81	92	41
VLT(%)	VLR(%)	UV(%)	IRR(%)950nm	IRR(%)1400nm	TSER

SINGLE LAYER CERAMIC FILM



CERAMICS SINGLE LAYER CERAMIC

SINGLE LAYER CERAMIC FILM

HS35

COLOR
CARBON BLACK

Thickness: 1.8 mil Warranty: 5 years

It combines excellent heat insulation, no signal interference, clear vision, and privacy protection features, providing a comfortable and smooth riding experience.

膜样区

35	6	99	75	82	51
VLT(%)	VLR(%)	UV(%)	IRR(%)950nm	IRR(%)1400nm	TSER

SINGLE LAYER CERAMIC FILM

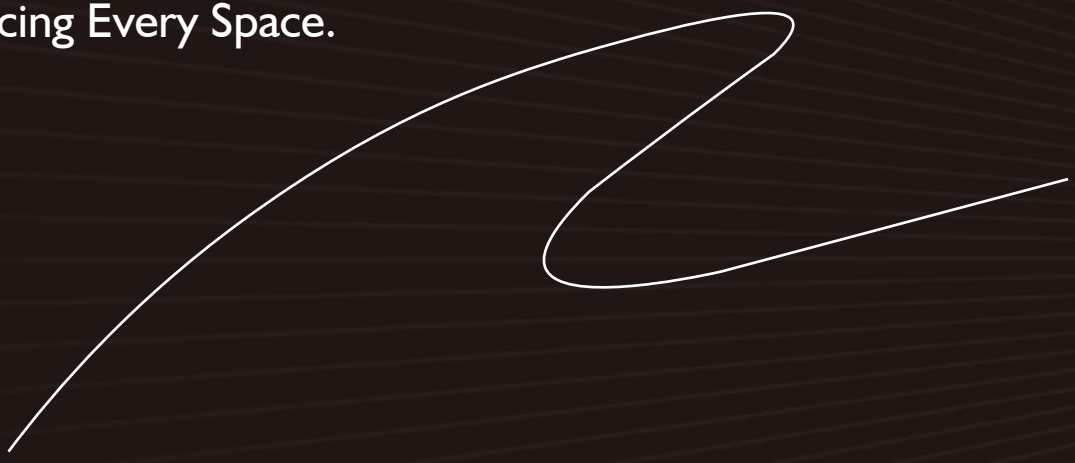
UV Block | Heat Insulation Sun Protection | Safety Shatterproof | Ultra-Clear Vision | Zero Signal Interference | Energy Saving

Style, Strength & Clarity

—All in one

Protecting Every Detail.

Enhancing Every Space.



TTT TECH PTE. LTD.