



RARE EARTH RE LAMINATED GLASS

断热稀土 × 易涂
光变 / 温变遮阳

EASYTO (SINGAPORE) PTE LTD | EASYTO (MALAYSIA) SDN BHD

2 Buroh Crescent #08-01D
ACE @ Buroh
Singapore 627546

🌐 www.easyto.sg | www.easyto.my

✉ enquiry@easyto.sg | enquiry@easyto.my

☎ +65 8901 0988



**A MAGICAL HEAT-BREAKING RARE EARTH LAMINATED
GLASS.BETTER THERMAL INSULATION THAN 99% OF
THE WORLD'S LAMINATED GLASS**



**EVERY SQUARE METER USED
PLANT TWO MORE TREES**

ENABLING CARBON NEUTRALITY

CONTRIBUTE CHINA'S STRENGTH TO THE CAUSE OF WORLD ENERGY CONSERVATION

SUPERENERGY K VALUE
SUPERENERGY THERMAL INSULATION FACTOR
PERFECT TRANSFORMATIO

Each Coating Of 1 Square Meter Saves CO₂ Emissions Of About 36,1kg/Year
Each Tree Can Absorb Or Store About 18kg/Year Of CO₂



*数据来自国家稀土研究院权威测试
测试地点为天津因电费、用电量与日照条件不同，各地节能数据略有差异

SOLAR SPECTRUM

UNDERSTANDING THE SOLAR SPECTRUM, ENJOY HEALTHY SUNSHINE

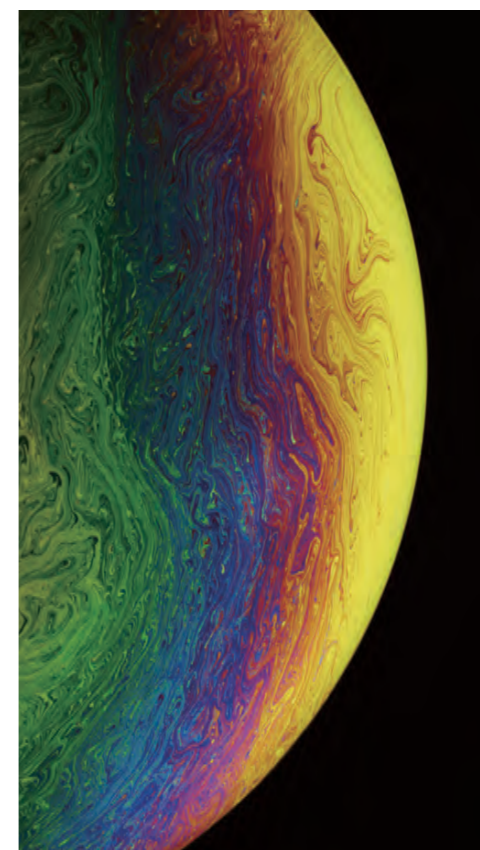
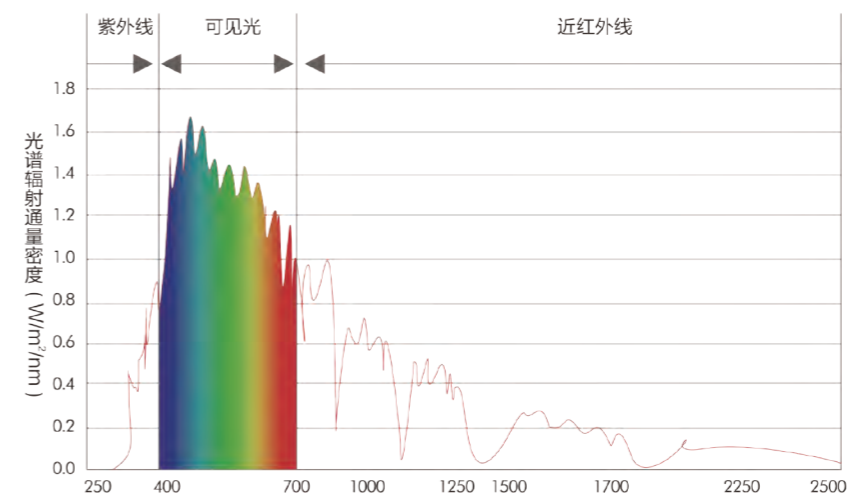
Sunlight Is A Continuous Spectrum Of Different Wavelengths Divided Into Visible And Invisible Light

VISIBLE LIGHT

Wave Length 400-700nm
Scattered Into Seven Colors: Red, Orange, Yellow, Green, Green, Blue, Purple Aggregation Is White Light

INVISIBLE LIGHT

Outside Red Light Is Called Infrared,
Wavelength 700-5300nm
Outside Violet Light Is Called Ultraviolet,
The Wavelength 250-400nm



1mm=100nm

5% UV 300-400nm

High UV (290-380nm)
The Culprit Of All Objects Aging And Skin Aging.

Low UV (380-400nm)
Promote vitamin absorption and antiseptic mildew.

43% VIS 400-700 nm

Visible light: promotes photosynthesis and good mood in plants.
Strong visible light: causes dizziness.

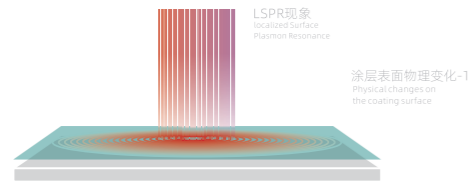
52% Mid-IR 700-2500 nm

Near infrared:
directional, irradiation will produce a burning sensation and a lot of heat.

Far infrared
(above 3900nm) improves blood circulation and enhances immunity.

CONTENT PRINCIPLE

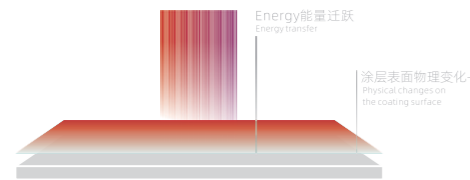
Traditional Low-e Glass And Solar Film On The Glass Surface Technology, Are The Use Of Metal Coating Layer To Reprocess The Glass, Through The Light Wave Reflection Principle To Achieve The Principle Of Glass Heat Insulation, While The Rare Earth Is The Use Of Rare Earth Elements Rich In 4f Electron Layer Orbit, And Red/ultraviolet Plasma Resonance Effect. Easy Coating Improves The Thermal Insulation, Sun Protection And Energy Saving Of Traditional Glass By Several Orders Of Magnitude!



近红外辐射波与涂层发生等离子体共振效应

Near-infrared Radiation Wave And Plasmon Resonance Effect Of Coating

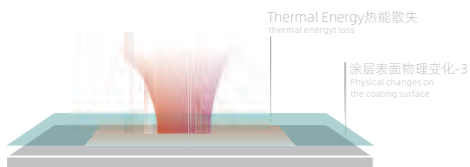
在近红外辐射波与稀土材料的作用下，近红外辐射波与涂层发生等离子体共振效应。



辐射热能被转化成物理热能

Radiant Heat Energy Is Converted Into Physical Heat Energy

辐射热能被转化成物理热能，降低玻璃的热传导与对流，有效节能20%以上。



热能被空气对流大量带走

Heat Energy Is Largely Taken Away By Air Convection

热能容易被空气带走，并被空气对流大量带走，以达到快速降温的目的。

WHAT IS THE RMAL BREAK RARE EARTH



WHAT IS THE RMAL BREAK RARE RARTH ?

Rare earth is the general name of the lanthanides and scandium and yttrium in the chemical periodic table. Usually in the form of oxides, Because the color is similar to earth and insoluble in water, it is collectively called rare earth. Rare earth has excellent photoelectric magnetic physical properties, and can be combined with many materials to synthesize a variety of different new materials to improve the quality and performance of products. Therefore, rare earth is also known as the mother of new materials and industrial vitamins, and is the life door of high-end

WITHOUT RARE EARTHS

All The High-tech Products In The World Would Have Remained On Laboratory Drawings

BUILDING ENERGY CONSUMPTION

46 %

China's dimension span is large, the northern winter weather is cold, the southern region With warm winters and hot summers, China's building energy consumption accounts for 46% of the total social energy consumption Building energy conservation lag, high energy consumption, serious pollution is restricting China's economy One of the key issues of sustainable development is also building in a carbon neutral context One of the important topics of energy conservation.

80 %

80% of a building's energy is lost through doors and Windows, and glass occupies the window surface 80% of the product, to solve the glass heat loss is to solve the most core building energy saving The problem of the heart.

95 %

China's annual new housing area of nearly 2 billion square meters, of which 80% High energy consumption buildings; Of the nearly 40 billion square meters of existing buildings, there are 95% are energy-intensive buildings.



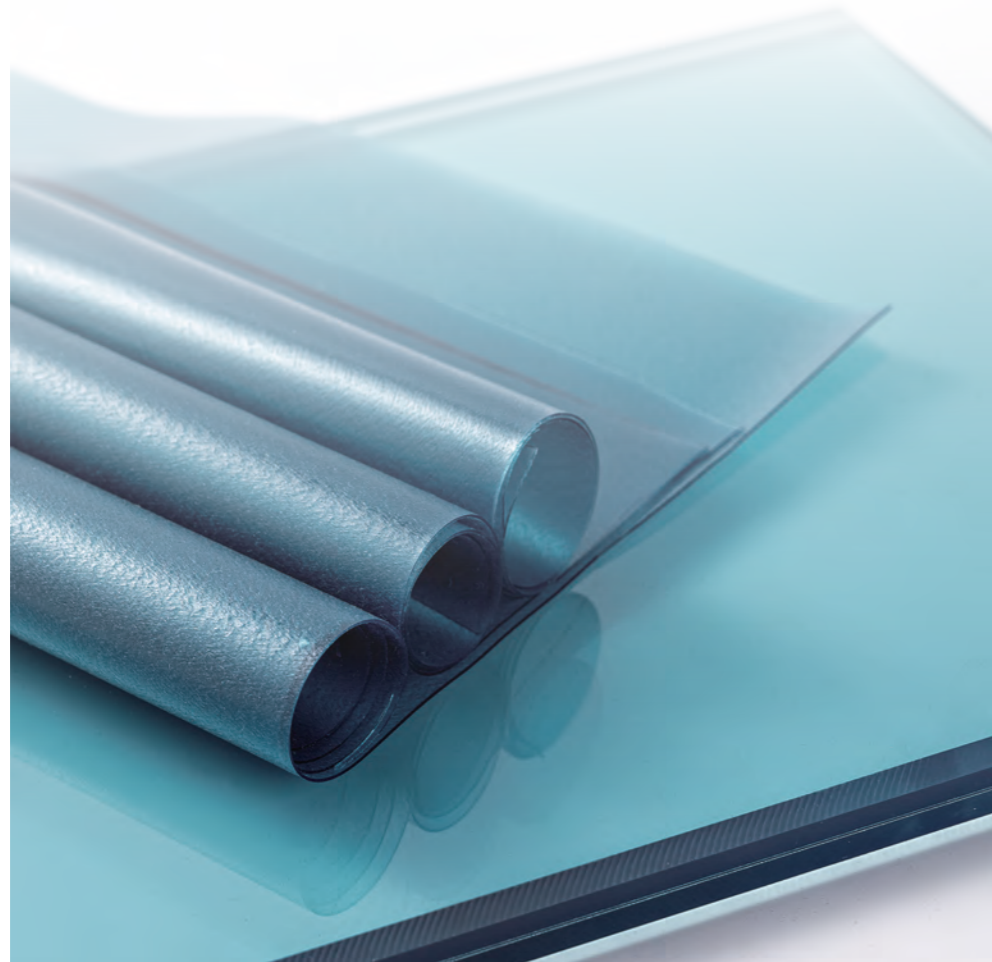
PRODUCT PARAMETER

PRODUCT NAME	断热稀土·RE夹胶膜	断热稀土·RE光变夹胶膜 (RE光变膜)
COLOR	稀土蓝	稀土蓝
VISIBLE TRANSMITTANCE	≥70%	15%-60%(可调节)
BLOCKED INFRARED-LIGHT	≥95%	≥98%
BLOCKED UV-LIGHT	≥99%	≥99%
THICKNESS(mm)	常备0.76mm 可定制1.14/1.52mm	常备0.76mm 可定制1.14/1.52mm
PRIMARY INSULATING MEDIUM	断热稀土	断热稀土
PRINCIPLE OF HEAT INSULATION	等离子体共振效应 (LSPR现象)	等离子体共振效应(LSPR现象+稀土转光)
TECHNICAL SOURCE	易涂(中国)&稀土研究院断热稀土联合实验室	易涂(中国)&稀土研究院断热稀土联合实验室
TENSILE STRENGTH(MPa)	≥22.8Mpa	≥22.8Mpa
BOND STRENGTH(MPa)	≥9Mpa	≥9Mpa
RESISTANCE TO MOISTURE AND HEAT	100°C 100%RH 1000h无气泡、无开裂、无松懈	100°C 100%RH 1000h无气泡、无开裂、无松懈
HIGH TEMPERATURE RESISTANCE	+90°C 1000h无气泡、无开裂、无松懈	+90°C 1000h无气泡、无开裂、无松懈
TENSILE STRENGTH (MPa)	合格	合格
抗冲击性	合格	合格

PRODUCT NAME	断热稀土·RE温变遮阳夹胶膜 (RE温变膜)
COLOR	稀土蓝
VISIBLE TRANSMITTANCE	8%-60%(可调节)
BLOCKED INFRARED-LIGHT	≥98%
BLOCKED UV-LIGHT	≥99%
THICKNESS(mm)	常备0.76mm 可定制1.14/1.52mm
PRIMARY INSULATING MEDIUM	断热稀土
PRINCIPLE OF HEAT INSULATION	等离子体共振效应(LSPR现象+稀土热敏)
TECHNICAL SOURCE	易涂(中国)&稀土研究院断热稀土联合实验室
TENSILE STRENGTH(MPa)	≥22.8Mpa
BOND STRENGTH(MPa)	≥9Mpa
RESISTANCE TO MOISTURE AND HEAT	100°C 100%RH 1000h无气泡、无开裂、无松懈
HIGH TEMPERATURE RESISTANCE	+90°C 1000h无气泡、无开裂、无松懈
TENSILE STRENGTH (MPa)	合格
抗冲击性	合格



EXAMINING REPORT



超强隔热

THE TEMPERATURE DROPS BY 5-11°C IN SUMMER
COMPREHENSIVE ENERGY SAVING OF 40% IN WINTER

Use Of Rare Earth Element 4f Electron Shell Orbit And Solar Incident Photon
Plasma Resonance Effect (Lspr Phenomenon) Occurs
Break Through The Traditional Pvb Membrane Single Performance
A More Insulated Experience

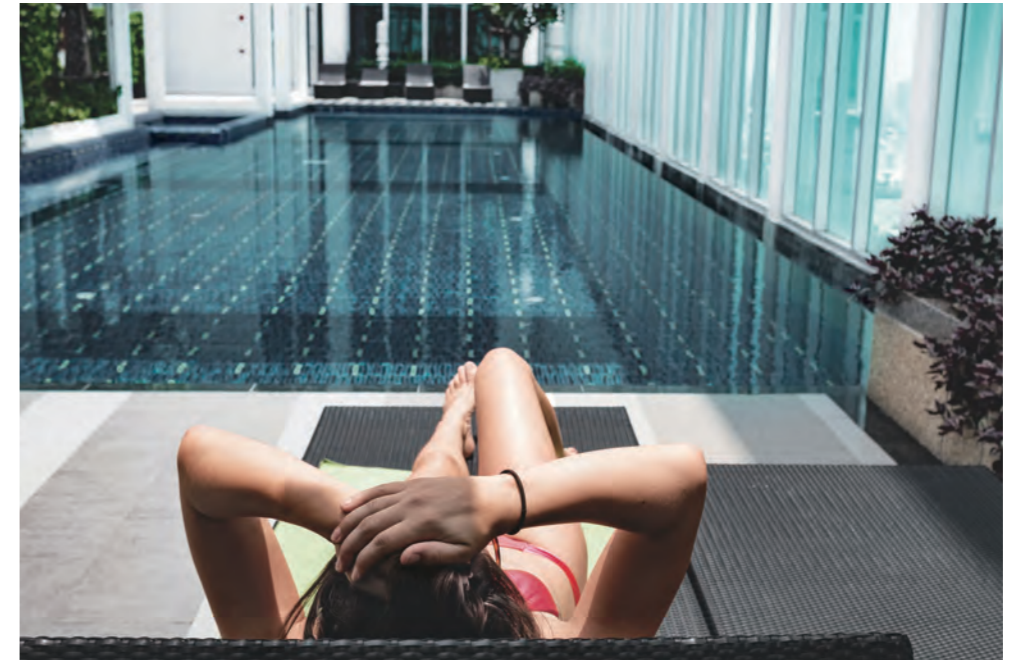


**SUPER HEAT
INSULATION**

智能变色

NO ELECTRICITY/NO WIRING
EFFECTIVELY BLOCKING SUNLIGHT
95% OF INFRARED RADIATION THERMAL ENERGY

The Breakthrough Will Break The Heat Of Rare Earth Materials And
Rare Earth Light Transfer Materials Are Introduced Into
The Re Light Change Laminated Glass Synthesized In The Traditional Pvb Film
The Light Transmittance Can Be Automatically Adjusted With The Intensity Of Ultraviolet Light.
You Can Enjoy A Healthy Sunshine Bath In The Glass Room

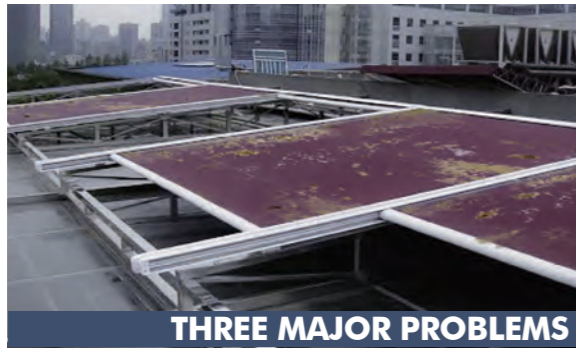


**INTELLIGENT
COLOR CHANGE**

温变遮阳

NO ELECTRICITY / WIRING
IT VARIES WITH THE AMBIENT TEMPERATURE
AUTOMATIC SUN SHADING

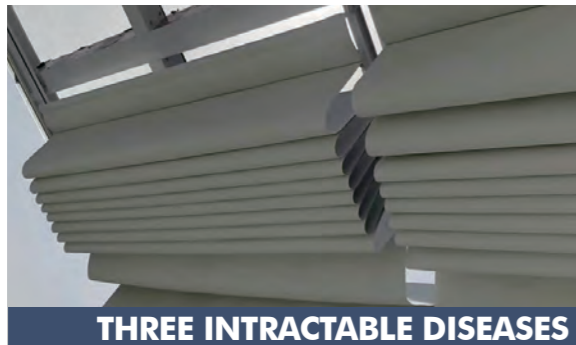
EXTERNAL SUNSHADE



THREE MAJOR PROBLEMS

BLOW OVER | CIRCUIT HAZARD | HARD TO CLEAN

INNER CURTAIN



THREE INTRACTABLE DISEASES

UGLY | HOT | DIRTY

ALMOST ALL THE BEAUTIFUL
GLASS ROOFS
**ARE FINALLY LOST TO
A SUNSHADE**



靶向屏蔽

EFFECTIVE BARRIER CAUSED BY THE SUN
HOUSEHOLD GOODS, CLOTHING FLOOR DISCOLORATION AGING PHENOMENON

Intelligent Screening Of Sunlight By Paramagnetic Rare Earth Elements
Strong Ultraviolet Light In The Wavelength Range 200-380nm Is Rejected
Visible Light In The Lossless Wavelength Range 400-750nm
Smart Screening Of Sunlight



**TARGETING
SHIELDING**

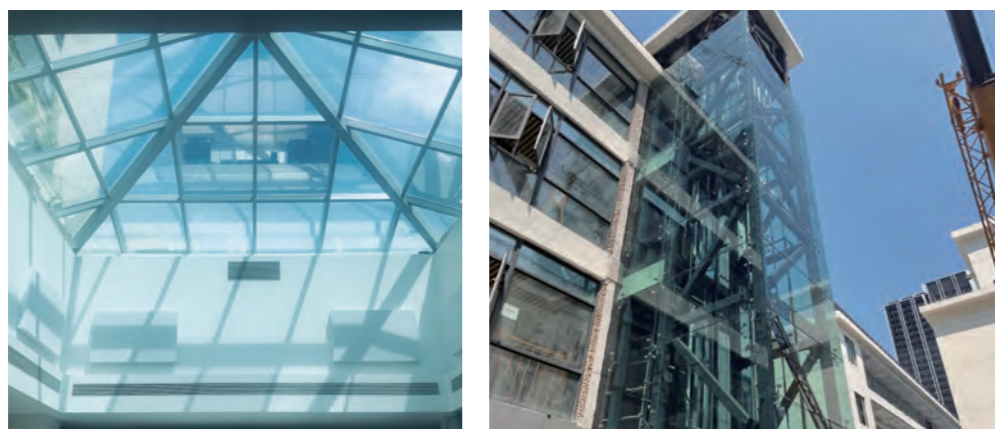
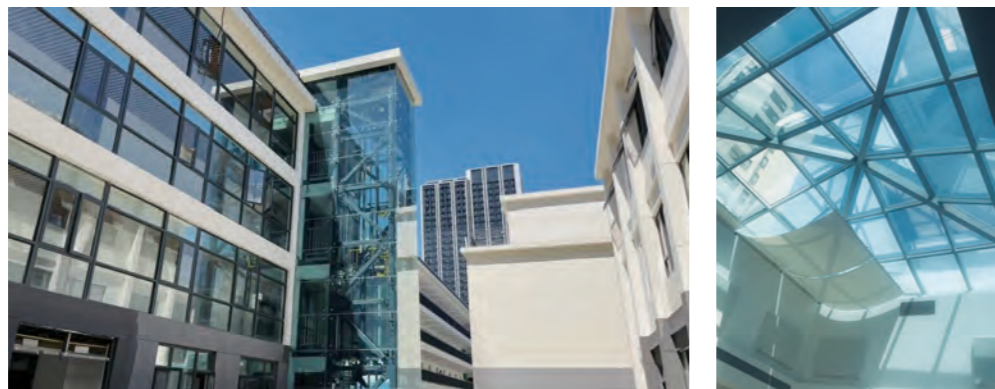
无需新增设备

NO ADDITIONAL EQUIPMENT REQUIRED
SUPER RARE EARTH STABILITY NO AFTER-SALE CONCERNS

The Melting Point Of Rare Earth Is Above 2000 C
Rare Earth Re Clip Film (Pvb) Made By Adding Rare Earth Material
More Stable Performance Without Worries



**NO ADDITIONAL
EQUIPMENT REQUIRED**



COOPERATING ORGANIZATION



中国人民解放军某空军基地指挥大楼
 深圳国家基因库 / 包钢集团公司信息大楼
 上海舜元大厦 / 苏州希尔顿酒店 / 无锡海岸城
 广州太古汇 / 广州华侨城 / 广州保利鱼珠港 / 广州财富中心
 昆明市政务服务中心 / 新疆镇江凤凰广场
 济南西站 / 平度高铁站 / 昌邑高铁站 / 滕州高铁站 / 莱西高铁站

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COMMAND BUILDING OF AIR FORCE BASE OF THE PEOPLE'S LIBERATION ARMY OF CHINA
 SHENZHEN NATIONAL GENOME BANK/SHENYEN GROUP INFORMATION BUILDING
 SHANGHAI SHUNYUAN BUILDING/SUZHOULITON HOTEL/WUXI COASTAL CITY
 GUANGZHOU TAIKOO HUI/GUANGZHOU HUAYAO CITY/GUANGZHOU PAOLI YUZHUKANG HEALTH CENTER
 KUNMING MUNICIPAL GOVERNMENT SERVICE CENTER/FENGJIANG SQUARE, ZHENJIANG, JIANGSU
 JINAN WEST STATION/HIGH SPEED RAILWAY STATION/HAOHE HIGH SPEED RAILWAY STATION/TENGZHOU HIGH SPEED RAILWAY STATION/LAISAN HIGH SPEED RAILWAY STATION



扫码关注“易小涂”

EASYTO

CHINA'S FIRST HIGH-TECH ENTERPRISE FOCUSING ON THE INNOVATION AND DEVELOPMENT OF RARE EARTH FUNCTIONAL MATERIALS INVENTOR OF THERMAL BARRIER COATING

A Set Of Research And Development, Production, Promotion, Sales As One, Focusing On Rare Earth Application Research And Development, Military Conversion To Civilian New High-tech Enterprises Sichuan Province Innovative Small And Medium-sized Enterprises, Sichuan Province Science And Technology Small And Medium-sized Enterprises, Rare Earth Society Director Unit Its Wholly-owned Subsidiary "China Thin Industry Development (Tianjin) Group Co., Ltd." Focuses On The Transformation Of Rare Earth Industry Achievements Its Holding Subsidiary "Zhongxi Easy Coating (Wuxi) International Trade Co., Ltd." Focuses On The Global Promotion And Sales Of Rare Earth Products A Joint Laboratory Was Established With Brire Rare Earth Research Institute Of Northern Rare Earth The Basic R&d Center Is Located In Tianjin, The Application R&d Center And The National Brand Operation Center Are Located In Chengdu, Sichuan Province



COOPERATING ORGANIZATION

AUTHORITATIVE MEDIA REPORT

A magical rare earth heat-breaking glass coating has been developed in Tianjin It marks a new breakthrough in the application field of rare earth with high added value in China!

GUANGMING DAILY

Yitou (China) joint Rare Earth Research Institute developed rare earth glass energy-saving products Three technologies to fill the gap in the field of domestic energy conservation!

ECONOMIC DAILY

Easyto coat (China)& Rare Earth Research Institute's rare earth glass products Realized China's corner overtaking of Europe, the United States and Japan in the field of rare earth high-tech technology!

PEOPLES DAILY



第十二届稀土国际论坛主讲的七大稀土新产品之一



2020年内蒙古自治区首批次新材料



国家“十三五”科技创新成就展



万吨级高附加稀土采购战略合作协议




工信部第十七届中博会专精特新小巨人企业新材料领域单项冠军



第六届中博会天津市创新发明与设计大赛一等奖

“THE MIDDLE EAST HAS OIL, CHINA HAS RARE EARTHES”

The position of China's rare earth resources can be compared with that of Middle East oil, which has extremely important strategic significance. We must do a good job in rare earth affairs and give full play to China's advantages in rare earth.



摘自《邓小平语录》

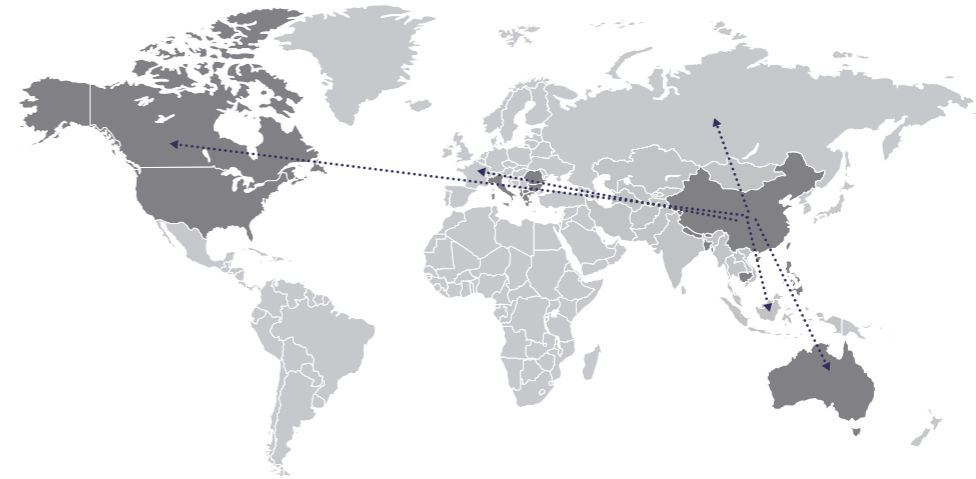
Chairman Deng

GLOBAL PATENT, RARE EARTH IS KING
ONE OUT OF EVERY FIVE INVENTION PATENTS IN THE WORLD IS
RELATED TO RARE EARTHS

**RARE EARTH APPLICATION,
NO NEED TO WORSHIP THE OCEAN**
CHINA HAS MORE RARE EARTH INVENTION PATENTS THAN
THE REST OF THE WORLD COMBINED

**BASED ON RARE EARTH,
THE POTENTIAL IS EASY**
YITU IS COMMITTED TO THE APPLICATION,
RESEARCH AND DEVELOPMENT,
PROMOTION AND ACHIEVEMENT TRANSFORMATION
OF RARE EARTH FUNCTIONAL MATERIALS IN THE CIVIL FIELD
FOCUS ON RARE EARTHS, NEVER DIVERSIFIED

By January 2023, The Product Has Been Used In Nearly 100 Projects
The Total Area Completed Has Reached 120,000 Square Meters
Application Projects Are Distributed To Zhangjiagang In Jiangsu Province In The East,
Kashgar In Xinjiang Province In The West, Sanya In Hainan Province In The South,
And Urumqi In Xinjiang Province In The North
All Kinds Of Climatic Zones In China Have Good Performance.





**JOIN US IN CONTRIBUTING TO
GLOBAL ENERGY CONSERVATION**

INNOVATIVE INSULATION TECHNOLOGY FOR
CARBON NEUTRALITY JOIN US IN CONTRIBUTING TO
GLOBAL ENERGY CONSERVATION



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WORLD SMART INSULATION

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ACE @ Buroh
Singapore 627546

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