



Website

LandVac® is a brand wholly owned by LandGlass

**LUOYANG LANDVAC Ti-VIG CO.,LTD**

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ⓘ The data listed in this catalog are subject to technical changes without notice.

Version 2026

# Titanium VIG

Defining True Premium Quality

# Making Life Safer and Better

Making Life Safer and Better  
Has Always Been the Unwavering Pursuit of LandGlass  
LandVac Titanium VIG  
Through relentless R&D and industrial innovation,  
LandVac is setting the pace for sustainable growth in the VIG industry.  
We are dedicated to revolutionizing green architecture and shaping a  
low-carbon future.  
With superior performance, uncompromising quality,  
and world-class service,  
we safeguard our living environments—enriching lives through a safer,  
more beautiful world.

\*Every second a greener future takes root

## Company Profile

**LUOYANG LANDVAC TI-VIG CO., LTD** is a leading innovation-driven enterprise specializing in R&D, manufacturing, and sales of LandVac titanium vacuum insulated glass (also known as LandVac). With outstanding advantages such as excellent thermal insulation, superior soundproofing, and ultra-thin lightweight structure, the LandVac products have earned widespread recognition across architecture\*, home appliances, transportation, and many other sectors, not only safeguarding comfortable and healthy living environments for millions of families but also making significant contributions to the global mission of carbon neutrality.

**LUOYANG LANDVAC TI-VIG CO., LTD. is a wholly-owned subsidiary of Luoyang LandGlass Technology Co., Ltd.**

\* "Architecture" includes existing buildings renovation, low-carbon buildings, and zero-carbon buildings.

Total CO<sub>2</sub>  
Emissions Reduced

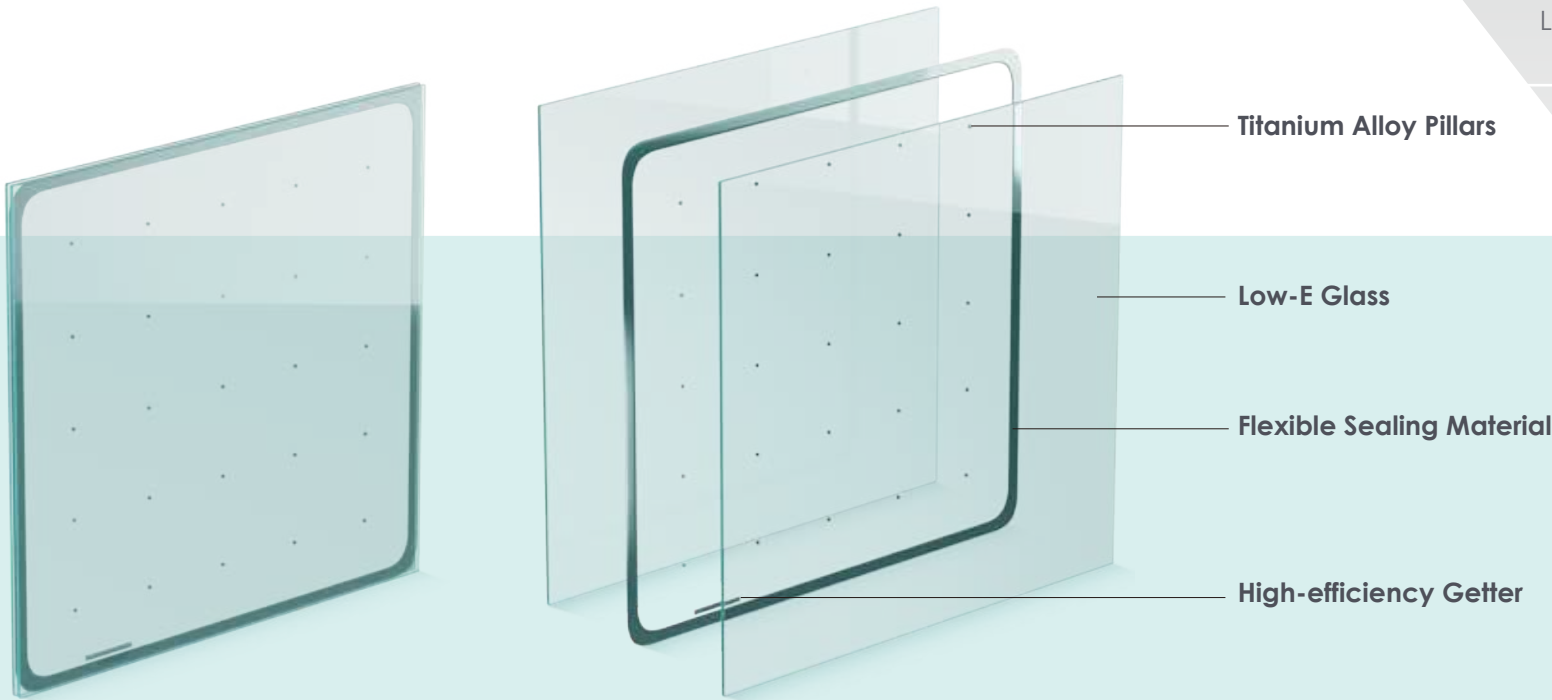
36000 Tons

Equivalent to

2,000,000 Trees Planted

# Titanium Vacuum Insulated Glass

Titanium vacuum insulated glass further enhances the performance of three core components of vacuum insulated glass (edge sealing, pillar, and getter) by utilizing the high specific strength, low thermal conductivity, superior gas absorption, and corrosion resistance of titanium alloys to make it a new generation of super vacuum insulated glass with higher strength, lower heat transfer, and an extended lifespan, with no compromise between aesthetics and performance.



- High-strength
- Low Thermal Conductivity
- Superior Gas Absorption
- Excellent Corrosion Resistance

## Core Advantages

### Thermal Insulation U-value as low as 0.3 W/(m².K)

Significantly reduces heat transfer coefficient of doors, windows, and curtain walls, lowering building heating and cooling energy consumption, improving comfort in living and working spaces, and shortening investment payback period.



### Anti-condensation Remaining condensation-free even with a temperature difference of more than 70°C

Avoids moisture and mold risks caused by condensation, reduces cleaning and maintenance costs, and preserves clear view through glass.



### Any Installation Angle 0-180° installation with constant U-value

The high vacuum cavity eliminates internal convective heat transfer. The U-value remains constant even when installed horizontally or at an angle, making it particularly suitable for skylights and roof windows.



### Tempered Safety Glass Safety Glass, Extremely Low Spontaneous Breakage

Manufactured with tempered safety glass and advanced processing techniques, LandVac achieves a more uniform stress distribution. Spontaneous breakage rate ≤ 3‰, reducing costs associated with breakage, replacement, and project delays, providing comprehensive protection for both people and property.



### Noise Reduction Weighted sound reduction ≥ 39 dB

Full-frequency noise reduction creates quiet indoor spaces and effectively improves comfort in residential and office environments.



### Lightweight Structure A 6.3 mm LandVac pane weighs only 15 kg/m²

The lightweight, thin structure combined with excellent thermal performance effectively reduces the overall load on curtain walls, lowers structural costs, and perfectly achieves high-performance lightweight doors and windows.



### High Bending Strength Bending strength 120+ MPa. Wind Load Resistance ±7200 Pa

Bending strength up to 120 MPa and tested wind load resistance up to ±7200 Pa, maintaining structural stability even under severe weather conditions such as typhoons and hurricanes.



### Ultra-Long Lifespan 10,000+ Thermal Cycling Tests

Natural weathering tests, UV radiation, salt spray, and over 10,000 accelerated aging tests simulate the harshest conditions, ensuring an extended lifespan of over 50 years for worry-free use.





# Titanium Vacuum Insulated Glass

Tailored VIG configurations are designed to withstand diverse climatic challenges—from extreme cold to tropical humidity, and high-altitude environments. Glass thickness options range from 6.3 mm to 16.3 mm, fully adaptable to various operating conditions and application requirements.

| Glass Configuration                     | U-value<br>W/(m²·K) | Visible Light Transmittance<br>τ <sub>v</sub> | Solar Heat Gain Coefficient<br>SHGC | Total Solar Infrared Transmittance<br>g <sub>IR</sub> | Weighted Sound Reduction Index<br>dB | Overall Thickness<br>mm | Notes                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------|---------------------|-----------------------------------------------|-------------------------------------|-------------------------------------------------------|--------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5TL(Single-Silver 90 Low-E)<br>+0.3V+5T | 0.50                | 0.79                                          | 0.61                                | 0.36                                                  | 39                                   | 10.3                    | This table displays only a selection of standard configurations. Glass pane thicknesses are available from 3 mm to 8 mm, with a full range of Single, Double, and Triple Silver Low-E coatings. We provide tailored integrated solutions for all application scenarios; specific configurations and performance parameters can be customized to meet your project requirements. |
| 5TL(Double-Silver 80 Low-E)<br>+0.3V+5T | 0.45                | 0.69                                          | 0.40                                | 0.12                                                  | 39                                   | 10.3                    |                                                                                                                                                                                                                                                                                                                                                                                 |
| 5TL(Double-Silver 60 Low-E)<br>+0.3V+5T | 0.45                | 0.56                                          | 0.34                                | 0.11                                                  | 39                                   | 10.3                    |                                                                                                                                                                                                                                                                                                                                                                                 |
| 5TL(Triple-Silver 70 Low-E)<br>+0.3V+5T | 0.40                | 0.68                                          | 0.32                                | 0.02                                                  | 39                                   | 10.3                    |                                                                                                                                                                                                                                                                                                                                                                                 |

Note:

- 1. The performance parameters in this table are based on VIG units with 5 mm glass panes. For other glass thicknesses like 3mm, 4mm, 6mm, 8mm, etc., thermal performance parameters can be used as a reference.
- 2. The thermal performance values in this table are calculated using WINDOW software according to the industry standard JGJ/T 151-2008 Calculation Specification for Thermal Performance of Windows, Doors and Glass Curtain-Walls.
- 3. For structural design involving VIG applications in windows, doors, or curtain walls, please refer to the industry standard Technical Specification for the Application of Vacuum Insulated Glass in Buildings.
- 4. All product parameters are subject to the laboratory test reports.



# Hybrid VIG

A perfect combination of VIG and insulated glass, integrating the advantages of both technologies. It offers superior thermal and acoustic insulation, enhanced safety, durability, and energy efficiency, improving overall living comfort and user experience.

| Glass Configuration                                | U-value<br>W/(m²·K) | Visible Light Transmittance<br>τ <sub>v</sub> | Solar Heat Gain Coefficient<br>SHGC | Total Solar Infrared Transmittance<br>g <sub>IR</sub> | Weighted Sound Reduction Index<br>dB | Overall Thickness<br>mm | Notes                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------|---------------------|-----------------------------------------------|-------------------------------------|-------------------------------------------------------|--------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5T+12A<br>+5TL(Single-Silver 90 Low-E)<br>+0.3V+5T | 0.48                | 0.71                                          | 0.54                                | 0.32                                                  | 40                                   | 27.3                    | This table displays only a selection of standard configurations. Glass pane thicknesses are available from 3 mm to 8 mm, with a full range of Single, Double, and Triple Silver Low-E coatings. We provide tailored integrated solutions for all application scenarios; specific configurations and performance parameters can be customized to meet your project requirements. |
| 5T+12A<br>+5TL(Double-Silver 80 Low-E)<br>+0.3V+5T | 0.44                | 0.62                                          | 0.38                                | 0.12                                                  | 40                                   | 27.3                    |                                                                                                                                                                                                                                                                                                                                                                                 |
| 5T+12A<br>+5TL(Double-Silver 60 Low-E)<br>+0.3V+5T | 0.45                | 0.51                                          | 0.33                                | 0.13                                                  | 40                                   | 27.3                    |                                                                                                                                                                                                                                                                                                                                                                                 |
| 5T+12A<br>+5TL(Triple-Silver 70 Low-E)<br>+0.3V+5T | 0.38                | 0.62                                          | 0.30                                | 0.04                                                  | 40                                   | 27.3                    |                                                                                                                                                                                                                                                                                                                                                                                 |

Note:

- 1. The performance parameters in this table are based on VIG units with 5 mm glass panes. For other glass thicknesses like 3mm, 4mm, 6mm, 8mm, etc., thermal performance parameters can be used as a reference.
- 2. The thermal performance values in this table are calculated using WINDOW software according to the industry standard JGJ/T 151-2008 Calculation Specification for Thermal Performance of Windows, Doors and Glass Curtain-Walls.
- 3. For structural design involving VIG applications in windows, doors, or curtain walls, please refer to the industry standard Technical Specification for the Application of Vacuum Insulated Glass in Buildings.
- 4. All product parameters are subject to the laboratory test reports.



# PVB Laminated VIG

Leveraging our pioneering PVB lamination process for Vacuum Insulated Glass, we deliver an ultra-thin, high-strength design that significantly reduces structural loads. This breakthrough provides a safer, more flexible, and cost-effective solution for VIG applications in curtain walls and large-scale window and door systems.



| Glass Configuration                              | U-value<br>W/ (m² ·K) | Visible Light Transmittance<br>τ <sub>v</sub> | Solar Heat Gain Coefficient<br>SHGC | Total Solar Infrared Transmittance<br>g <sub>IR</sub> | Weighted Sound Reduction Index<br>dB | Overall Thickness<br>mm | Notes                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------|-----------------------|-----------------------------------------------|-------------------------------------|-------------------------------------------------------|--------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5TL(Single-Silver 90 Low-E)<br>+0.3V+5T+0.76P+5T | 0.49                  | 0.78                                          | 0.60                                | 0.36                                                  | 41                                   | 16.06                   | This table displays only a selection of standard configurations. Glass pane thicknesses are available from 3 mm to 8 mm, with a full range of Single, Double, and Triple Silver Low-E coatings. We provide tailored integrated solutions for all application scenarios; specific configurations and performance parameters can be customized to meet your project requirements. |
| 5TL(Double-Silver 80 Low-E)<br>+0.3V+5T+0.76P+5T | 0.44                  | 0.66                                          | 0.40                                | 0.12                                                  | 41                                   | 16.06                   |                                                                                                                                                                                                                                                                                                                                                                                 |
| 5TL(Double-Silver 60 Low-E)<br>+0.3V+5T+0.76P+5T | 0.44                  | 0.54                                          | 0.33                                | 0.10                                                  | 41                                   | 16.06                   |                                                                                                                                                                                                                                                                                                                                                                                 |
| 5TL(Triple-Silver 70 Low-E)<br>+0.3V+5T+0.76P+5T | 0.39                  | 0.66                                          | 0.31                                | 0.02                                                  | 41                                   | 16.06                   |                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                  |                       |                                               |                                     |                                                       |                                      |                         |                                                                                                                                                                                                                                                                                                                                                                                 |

Note:

1. The performance parameters in this table are based on VIG units with 5 mm glass panes. For other glass thicknesses like 3mm, 4mm, 6mm, 8mm, etc., thermal performance parameters can be used as a reference.
2. The thermal performance values in this table are calculated using WINDOW software according to the industry standard JGJ/T 151-2008 Calculation Specification for Thermal Performance of Windows, Doors and Glass Curtain-Walls.
3. For structural design involving VIG applications in windows, doors, or curtain walls, please refer to the industry standard Technical Specification for the Application of Vacuum Insulated Glass in Buildings.
4. All product parameters are subject to the laboratory test reports.



# Titanium VIG Window & Door Systems

Centered on high-performance Ti-VIG technology and integrated with a variety of sophisticated profile systems, our solutions redefine premium living. By seamlessly blending energy efficiency, acoustic insulation, safety, and modern aesthetics, we deliver innovative window and door systems that bring unparalleled comfort, tranquility, and a refined sense of texture to every home.

| Profiles                             | Exterior Window Product Series                                          | Glass Configuration | U-value<br>W/ (m² ·K) | Solar Heat Gain Coefficient<br>SHGC | Water Tightness<br>(Grade) | Air Tightness<br>(Grade) | Wind Load Resistance<br>(Grade) | Notes                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------|-------------------------------------------------------------------------|---------------------|-----------------------|-------------------------------------|----------------------------|--------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aluminum Windows & Doors             | 70 Series Thermal Break Aluminum Casement Windows (34 mm Thermal Strip) | 5TL+0.3V+5T         | 0.95~1.15             | 0.23~0.53                           | 6                          | 8                        | 9                               | This table displays only a selection of standard configurations. Glass pane thicknesses are available from 3 mm to 8 mm, with a full range of Single, Double, and Triple Silver Low-E coatings. We provide tailored integrated solutions for all application scenarios; specific configurations and performance parameters can be customized to meet your project requirements. |
|                                      | 80 Series Thermal Break Aluminum Casement Windows (44 mm Thermal Strip) | 5T+16A+5TL+0.3V+5T  | 0.75~0.95             | 0.23~0.47                           | 6                          | 8                        | 9                               |                                                                                                                                                                                                                                                                                                                                                                                 |
|                                      | 95 Series Thermal Break Aluminum Casement Windows (54 mm Thermal Strip) | 5T+24A+5TL+0.3V+5T  | 0.70~0.90             | 0.23~0.46                           | 6                          | 8                        | 9                               |                                                                                                                                                                                                                                                                                                                                                                                 |
| Aluminum-Clad Wood Composite Windows | 92 Series Aluminum-Clad Wood Windows                                    | 5TL+0.3V+5T         | 0.90~1.10             | 0.22~0.50                           | 6                          | 8                        | 9                               |                                                                                                                                                                                                                                                                                                                                                                                 |
|                                      |                                                                         | 5T+12A+5TL+0.3V+5T  | 0.80~1.00             | 0.22~0.44                           | 6                          | 8                        | 9                               |                                                                                                                                                                                                                                                                                                                                                                                 |
|                                      | 106 Series Aluminum-Clad Wood Windows                                   | 5T+16A+5TL+0.3V+5T  | 0.70~0.90             | 0.21~0.44                           | 6                          | 8                        | 9                               |                                                                                                                                                                                                                                                                                                                                                                                 |
| uPVC Windows                         | 70 Series uPVC Casement Windows (6-Chamber)                             | 5TL+0.3V+5T         | 0.90~1.10             | 0.22~0.50                           | 5                          | 8                        | 8                               |                                                                                                                                                                                                                                                                                                                                                                                 |
|                                      |                                                                         | 5T+12A+5TL+0.3V+5T  | 0.80~1.00             | 0.22~0.44                           | 5                          | 8                        | 8                               |                                                                                                                                                                                                                                                                                                                                                                                 |
|                                      | 82 Series uPVC Casement Windows (7-Chamber)                             | 5T+22A+5TL+0.3V+5T  | 0.70~0.90             | 0.21~0.44                           | 6                          | 8                        | 9                               |                                                                                                                                                                                                                                                                                                                                                                                 |
| Polyurethane (PU) Windows            | 65 Series Glass Fiber Reinforced Polyurethane Casement Windows          | 5TL+0.3V+5T         | 1.10~1.30             | 0.22~0.50                           | 6                          | 8                        | 9                               |                                                                                                                                                                                                                                                                                                                                                                                 |
|                                      |                                                                         | 5T+12A+5TL+0.3V+5T  | 1.00~1.10             | 0.22~0.44                           | 6                          | 8                        | 9                               |                                                                                                                                                                                                                                                                                                                                                                                 |
|                                      | 75 Series Glass Fiber Reinforced Polyurethane Casement Windows          | 5T+12A+5TL+0.3V+5T  | 0.80~1.00             | 0.21~0.44                           | 6                          | 8                        | 9                               |                                                                                                                                                                                                                                                                                                                                                                                 |

Note:

1. Data in this table is based on a standard window size of 1500 mm × 1500 mm, with a frame-to-window ratio of 25%–35%. These values are provided for design reference only.
2. For structural design involving VIG applications in windows, doors, or curtain walls, please refer to the industry standard Technical Specification for the Application of Vacuum Insulated Glass in Buildings.



# Superior Acoustic Insulation

In addition to exceptional thermal insulation, LandVac Titanium VIG offers outstanding acoustic performance, demonstrating a significant advantage in mitigating low-to-mid frequency noise.

| Glass Configuration  |                        | Weighted Sound Reduction Index<br>R <sub>w</sub> (dB) | Spectrum Adaptation |                      | R <sub>w</sub> +C | R <sub>w</sub> +C <sub>tr</sub> |
|----------------------|------------------------|-------------------------------------------------------|---------------------|----------------------|-------------------|---------------------------------|
|                      |                        |                                                       | C (dB)              | C <sub>tr</sub> (dB) | (dB)              | (dB)                            |
| VIG                  | 4+0.3V+4               | 36                                                    | 0                   | -2                   | 36                | 34                              |
|                      | 5+0.3V+5               | 38                                                    | -1                  | -2                   | 37                | 36                              |
|                      | 6+0.3V+6               | 39                                                    | -1                  | -2                   | 38                | 37                              |
| Hybrid VIG           | 4+12A+4+0.3V+4         | 38                                                    | -3                  | -7                   | 35                | 31                              |
|                      | 5+12A+5+0.3V+5         | 40                                                    | -2                  | -5                   | 38                | 35                              |
|                      | 6+12A+6+0.3V+6         | 40                                                    | -1                  | -4                   | 39                | 36                              |
| Laminated VIG        | 4+0.76P+4+0.3V+4       | 39                                                    | 0                   | -2                   | 39                | 37                              |
|                      | 5+0.76P+5+0.3V+5       | 41                                                    | -1                  | -3                   | 40                | 38                              |
|                      | 6+0.76P+6+0.3V+6       | 41                                                    | -1                  | -2                   | 40                | 39                              |
| Laminated Hybrid VIG | 4+0.76P+4+20A+4+0.3V+4 | 44                                                    | -3                  | -7                   | 41                | 37                              |
|                      | 5+0.76P+5+20A+5+0.3V+5 | 45                                                    | -2                  | -6                   | 43                | 39                              |
|                      | 6+0.76P+6+20A+6+0.3V+6 | 45                                                    | -1                  | -5                   | 44                | 40                              |

**Note:**

1. Performance values in this table are for reference only. Actual results may vary based on testing conditions. Actual performance is subject to authoritative test reports.
2. This table provides the Weighted Sound Reduction Index (R<sub>w</sub>) for standard VIG and its composite units. The R<sub>w</sub> of LandVac VIG Composite Units can exceed 50 dB, with tailored configurations available to meet specific project requirements.

## Standardization Contributor

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National Standards

- GB/T 38586-2020  
Vacuum Insulating Glass
- GB46030-2025  
Safety Technical Requirements for Safety Glazing Materials in Building
- GB/T 35604-2025  
Green Product Assessment–Building Glass
- GB 50189  
Design Standard for Energy Efficiency of Public Buildings
- GB/T 15763.2-2025  
Safety Glazing Materials in Building – Part 2: Tempered Glass
- GB/T 15763.3-2025  
Safety Glazing Materials in Building – Part 3: Laminated Glass

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Local Standards

- DB13 (J)/T8503-2022  
Design Standard for Energy Efficiency of Ultra-Low Energy Residential Buildings
- 23BJ13-5  
General Architectural Design Atlas: Energy-Efficient Windows and Doors
- DB37/T 5155-2025  
Design Standard for Energy Efficiency in Public Buildings
- DBJT19-01-2024  
Design Atlas for Energy-Efficient Windows and Doors using Vacuum Insulated Glass

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Industry Standards

- JC/T2708-2022  
Test Method for Thermal Transmittance (U-value) of Vacuum Insulated Glass
- Technical Specification for the Application of Vacuum Insulated Glass in Buildings

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Association Standards

- T/CECS 2090-2025  
Technical Specification for the Application of Vacuum Insulated Glass in Buildings
- T/ZBH 012-2019  
Glass for Transparent Parts of Passive Ultra-Low Energy Buildings
- 23JT815  
General Code for Energy Efficiency and Renewable Energy Utilization in Buildings  
GB55015-2021 Design Atlas for Integrated Windows and Doors

## Diverse Products



Functional VIG\*



Photovoltaic VIG



VIG for Home Appliances



Curved VIG



Decorative VIG

\* "Functional VIG" includes Hybrid VIG with integrated blinds, switchable PDLC VIG, Thermochromic VIG, fire-rated VIG, etc.

## Urban Retrofitting

### Add-on VIG Retrofit

This no-demolition solution retains existing frames and glass by installing Titanium VIG directly onto the original pane, rapidly enhancing thermal and acoustic insulation, breathing new life into old windows.

### Glass-only Replacement

This easy-to-install method retains the original frames by replacing the old glass with Titanium VIG, significantly boosting energy efficiency and noise reduction, creating a healthier living environment.

### Full Window Replacement

A full system upgrade to Titanium VIG windows maximizes thermal insulation, soundproofing, and anti-condensation performance, delivering a total improvement in aesthetics, safety, and durability.



# Honors & Certifications



20 year  
Warranty



3A AAA  
Credit Rating



Approved by  
Global Giants



PICC PICC Insured



Global  
Service Network

- 🏆 The first VIG extensively used in premium appliances
- 🏆 The first VIG that passed high-speed rail safety performance test
- 🏆 The first VIG compatible with PVB lamination
- 🏆 The first VIG for BIPV applications
- 🏆 Successfully applied in China's fifth Antarctic research station
- 🏆 Named one of the “Top 75 Products” by Building Design + Construction in two consecutive years
- 🏆 Winner of 2025 R&D 100 Award

# R&D and Manufacturing Excellence

LUOYANG LANDVAC TI-VIG CO., LTD. builds the world's first intelligent vacuum insulated glass production line. By integrating an industry-leading smart factory with a dedicated testing center, we have established an end-to-end integrated ecosystem spanning R&D, manufacturing, sales, and technical support. This comprehensive capability allows us to address diverse application needs, delivering efficient, reliable, and customized solutions to global clients.

**500,000 m<sup>2</sup>**  
Annual Production Capacity

**230,000 +m<sup>2</sup>**  
Smart Manufacturing Base

**10,000 +**  
Process Tests

**430 +**  
Patents Granted

**100 +**  
R&D Personnel

World's First Titanium Vacuum Insulated Glass  
Smart Factory

Architectural Acoustics Lab

Advanced R&D Equipment  
and Testing Instruments

Multi-stage Quality Inspection

# Project Cases

- **Project:** New Headquarters of Beijing Institute of Architectural Design
- **Glass Configuration:** 8 single-silver Low-E + 12Ar + 6 double-silver Low-E + 0.3V + 6 tempered VIG (ultra-clear outer pane, warm edge)
- **Project Overview:** Over 2,600 m<sup>2</sup> of vacuum insulated glass panels were used in this project, achieving a composite U-value as low as 0.9 W/(m<sup>2</sup> K) across its transparent curtain wall sections. Leveraging its core technological advantages, the project delivers substantial energy and carbon savings: 4.06 million kWh reduction in annual electricity consumption and 2,990 tons in carbon emissions reduction.



- **Project:** Germany FFS-VIG Demonstration Project
- **Glass Configuration:** 4+0.76P+4+24Ar+5T+0.3V+5T
- **Project Overview:** As Europe's first passive curtain wall project to feature vacuum insulated glass, this development successfully integrates ultra-thin, high-insulation windows into a unified facade system, achieving a U-value below 0.8 W/(m<sup>2</sup> K). Compared to triple-pane argon-filled units, the implementation of LandVac Titanium VIG reduced fossil fuel (natural gas) consumption for heating by up to 16%—realizing 15.2% annual energy savings and an impressively short payback period of only 5.3 years.



# Extensive Applications

## • Luxury Villas:

Shanghai Meilihua Garden Villa, Guangzhou Qingyuan Country Garden, Nanjing Natural Sky Villas, Hangzhou Greentown Taohuayan Villa, Wuhan Lanting Shenghui Villa, Wuhan Yuyuedongfang Project, Xiangyang Courtyard Villa, Xiangyang Panggong Bieyuan Villa, Chongqing Rose Villa, Xi'an Guoxi Tianchen Villa, Weifang Zhongtaicheng Villa, Qingdao Poly Zijingge Villa...



## • Projects Overseas:

Harvard University, University of Cambridge, Hilton Hotel Switzerland, H. F. Building in USA, Centennial Castle in Paris, France, Liverpool Railway Station, UK, hotels in UK, High School Renovation in UK, Industrial Park Office in Italy, Private Estates in Ireland, Ultra-Low-Energy Villas in Netherlands, Villas in Arnhem, Netherlands, A Monastery in Netherlands, Townhouses in Amsterdam, Commercial House in Austria, Luxury Villas in Portugal, Private Villas in Australia, Rural Villas in South America...



## • Ultra-Low Energy Buildings:

Beijing Baizhuan Passive House, Energy-saving Buildings in Beijing Coking Plant, Dougezhuang Kindergarten in Beijing, ATEQ China Headquarters Near-Zero Energy Project, Construction Corps' Community in Xinjiang, Xinjiang Academy of Building Research, Anhui Bengbu Photovoltaic Curtain Wall, A Kindergarten in Shandong, Huajian Grand Hotel in Shandong, FIVE-WIN Zero Carbon Complex, No. 1 Building, Tianshan, Shijiazhuang, Nanyang City Library; Wuxi Shangxian Lake Fund PARK Phase II, Huawei-JAC MAEXTRO Super Factory...



## • Public Buildings:

New Headquarters of Beijing Institute of Architectural Design, Beijing No.4 High School Xiong'an campus, CHN Energy, Erlitou Relic Museum, The First National Congress Venue, A Military Outpost in Jilin, A Courthouse in Xi'an, A Kindergarten in Huangshi, A Kindergarten in Wuhan, R&D Center in Hefei, Tangshan Municipal Party School, A Kindergarten in Ezhou, Antarctic Research Station...

# Global Network

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## 10<sup>+</sup>

Comprehensive quality and reliability tests by over ten domestic and international companies and institutions

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## 50<sup>+</sup>

Assisted more than 50 window and door companies to complete the development of LandVac matching profiles

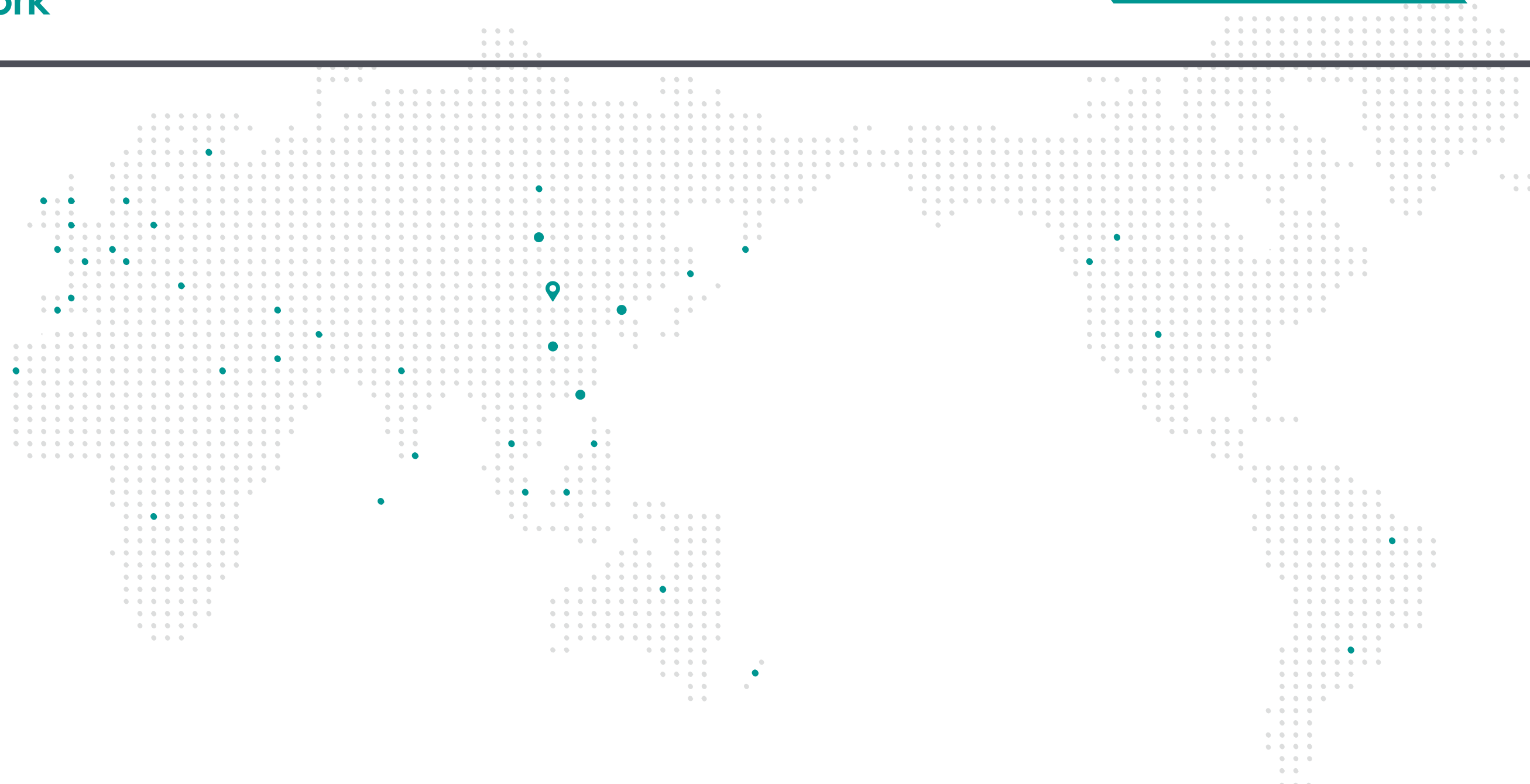
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## 1200<sup>+</sup>

Successfully completed over 1,200 projects involving ultra-low energy buildings, high-end villas, and high-end home appliances applications

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## 5

Domestic Marketing Centers

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## 30<sup>+</sup>

International Marketing Agencies

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LUOYANG LANDVAC TI-VIG CO., LTD. currently has 3 subsidiaries, 2 branch offices, and international marketing agencies in over 30 countries and regions, establishing a comprehensive one-stop marketing network.

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