THERMIN® COAT

ThermINCoat Integration on Surface #3 - Manufacturer Application Benefits

1 Reduced Radiative Transfer Within the IGU

Surface #3 placement positions ThermINCoat within the IGU cavity, directly facing the outer pane. This allows it to act as a radiant barrier that reflects infrared heat back into the room, reducing radiative losses.

- Real-World Impact:
- Significantly lowers radiant heat transfer.
- Helps maintain consistent indoor temperatures in all seasons.

2 Strong U-Value Reduction Without Exposed Film

By contributing to total thermal resistance inside the unit, ThermINCoat improves U-value while remaining fully protected from abrasion, dirt, or accidental damage.

- Example Results:
- From 1.1 to 0.78 W/m²·K (double glazing)
- From 1.0 to 0.73 W/m²·K (triple glazing)

3 Enhanced IGU Durability and Aesthetics

Placing ThermINCoat on Surface #3 ensures it is sealed inside the cavity and not exposed to the indoor environment. This guarantees consistent performance and long-term durability without cleaning or maintenance.

- Real-World Impact:
- No visual degradation or surface wear.
- Maintains clean appearance and clarity over lifespan.

4 Improved Performance Consistency

Factory-integrated ThermINCoat on Surface #3 avoids installation variability and ensures uniform performance across all units.

- Real-World Impact:
- Every IGU performs to specification.
- Reduced callbacks and warranty claims.

5 Compatibility with Sealed Unit Testing

As the film is fully enclosed within the IGU, it remains unaffected by moisture, condensation, or surface contaminants. It is fully compatible with EN 1279 and EN ISO 10077 performance assessments.

- Real-World Impact:
- Compliant with IGU manufacturing and certification standards.
- Can be included in declared centre-pane U-values.

6 Maintains Inner Pane Surface Temperature

Although not directly exposed to the room,

ThermINCoat on Surface #3 still influences the inner surface temperature by limiting heat loss through the inner pane and cavity.

- Real-World Impact:
- Supports warmer indoor-side glazing surface.
- Helps reduce localised discomfort near windows.

7 Summary Table Benefits of ThermINCoat on Surface #3

Benefit Area	Impact When Applied to Surface #3 (Inside Face of Inner Pane)
Radiative Heat Reduction	Reduces IR transfer across the cavity
U-Value Performance	Improves insulation by 0.3–0.4 W/m²·K-
Durability	Fully protected inside the sealed unit
Aesthetics	No visible wear, dirt, or fogging
Certification Compatibility	Aligned with EN 1279 / ISO 10077
Thermal Comfort	Supports warmer internal glass in winter
Manufacturing Consistency	Controlled performance in every unit