

This document provides a structured technical overview of the **MULTIMONT Glattstrich System** — a certified connection system for window installation in existing buildings. It is addressed to **window installers, planners, architects, and procurement professionals** evaluating systematic solutions for retrofit window connections. It covers the problem context, system logic, product components, certification results, and application fields.

CORE SYSTEM PROPOSITION

From craft-based execution to a defined, specifiable connection system.

The MULTIMONT Glattstrich System addresses a structural problem in retrofit window installation: the absence of a defined joint flank. It converts a variable, substrate-dependent interface into a reproducible, certifiable system component.

Certified System
ift M0-01/1

Report 2025-01-0443-B1
PfB · TÜV NORD GROUP

THE TECHNICAL PROBLEM

Retrofit reveals provide no defined connection surface.

In existing buildings, the reveal zone is rarely in a technically defined state. Conventional preparation relies on wet plaster skim or localised levelling — methods that depend on substrate adhesion, drying conditions, workmanship consistency, and site circumstances.

The sealing tape or membrane is applied onto this variable surface. Its long-term performance — airtightness, driving rain resistance — depends directly on the stability and geometry of the underlying flank. Variable substrate quality produces variable connection quality. This dependency cannot be resolved through improved application technique alone. It is a systemic limitation of conventional preparation methods.

SYSTEM LOGIC – THREE STEPS, DEFINED OUTCOME



01 Glattstrich Panel

Bonded into the reveal using adhesive or 1K PU foam. Replaces wet skim coat. Creates a planar, load-bearing, geometrically defined mounting surface with consistent material properties throughout.

02 Multi-Function Tape (Multifunktionsband)

Applied to the defined system surface rather than the existing substrate. Provides the interior airtight layer, exterior driving-rain resistant layer, and thermal insulation within the joint in a single, specified application. Available in multiple widths.

03 Multi-Foam MM410 — 1K PU Assembly Foam

Low-expansion polyurethane foam. Thermal conductivity $\lambda = 0.033$ W/(m·K). Sound insulation 63 dB (EN ISO 10140). Adhesion to wood, concrete and metal. Year-round application. Made in EU.

SYSTEM VS. CONVENTIONAL APPROACH

What the system changes — technically.

Criterion	Conventional	MULTIMONT
Joint flank condition	Variable, site-dependent	✓ Geometrically defined
Substrate dependency	High	✓ Structurally eliminated
Execution variance	High, operator-sensitive	✓ Systematised
Specifiable for tender	Not possible	✓ Fully specifiable
Independent certification	None	✓ ift M0-01/1
Guide rail zone coverage	Partial	✓ Full connection depth

RELEVANCE BY STAKEHOLDER

Installation Companies

Reduced process variance per installation. Consistent, repeatable quality independent of substrate condition. Shorter preparation time on site.

Planners and Architects

A system that can be specified in tender documents, backed by independent ift test documentation and a defined installation sequence.

Building Owners

Certified airtightness, driving-rain resistance and long-term durability — documented and traceable, not dependent on individual workmanship.

Public Procurement

A testable, auditable connection system with published certification data. Suitable for performance-based specification in public-sector contracts.

The core principle of the MULTIMONT system is not an improvement to the sealing layer — it is the creation of a defined surface on which the sealing layer can perform reliably. Connection quality becomes a function of system specification, not site conditions.

Technical Validation — ift Guideline MO-01/1

The Glattstrich System was tested by PfB GmbH & Co. Prüfbüro für Bauelemente KG (a TÜV NORD GROUP company) in accordance with ift-Richtlinie MO-01/1 — the established European reference standard for the usability of sealing systems at building body connections of windows. The following results refer to the documented system build as tested.

CERTIFICATION TEST PROGRAMME AND RESULTS

PASS	Driving Rain Resistance DIN EN 1027 · System verified to 600 Pa · No leakage detected at any joint location
PASS	Airtightness DIN EN 1026 · DIN EN 12114 · Air permeability: $a < 0.1 \text{ m}^3 / (\text{h} \cdot \text{m} \cdot (\text{daPa})^{2/3})$
PASS	Thermal Cycling External temperature range: $-15 \text{ }^\circ\text{C}$ to $+60 \text{ }^\circ\text{C}$ · 10 complete cycles · No functional changes observed
PASS	Long-term Durability 10,000 operating cycles completed · No relevant changes to connection zone structure or performance
PASS	Pressure-Suction Cyclic Loads Dynamic loading per ift MO-01/1 · System integrity maintained across full load programme
DATA	Thermal Bridge Factor fRsi $fRsi \geq 0.70$ · Connection detail meets current energy performance and mould risk requirements

600 Pa Driving rain resistance verified	≥ 0.70 fRsi Thermal bridge factor	10k cycles Durability test passed
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MULTI-FOAM MM410 — TECHNICAL DATA (EN 17333)

Property	Value	Standard
Thermal conductivity	0.033 W/(m·K)	EN 12667
Sound insulation Rst,w	63 dB	EN ISO 10140
Density in joint (3×10 cm)	17–22 kg/m³	WGM106
Temperature resistance	−50 to +90 °C	—
Expansion pressure	< 0.7 kPa	EN 17333-2
Tensile strength	> 55 kPa	EN 17333-4
Movement capacity	± 12.5 %	WGM113
Fire class (cured foam)	B2	DIN 4102-1

INSTALLATION SEQUENCE

The system follows a defined, repeatable sequence. Each step produces a measurable intermediate condition. The sequence can be specified in tender documents and verified on site.

- 1

Reveal Preparation
Remove loose particles, dust and unstable material. Pre-fill larger voids as required. No wet plaster application. No drying time. The substrate condition no longer determines connection quality — it only affects panel adhesion, which is addressed in step 2.
- 2

Bond Glattstrich Panel
Panel is fixed in the reveal using suitable bonding adhesive or 1K PU foam (Multi-Foam MM410). Creates a planar, load-bearing surface with defined geometry. The joint flank is now a system component, not a site condition.
- 3

Apply Multi-Function Tape
Tape is applied to the panel surface — a defined, stable substrate with known properties. Interior airtight layer and exterior driving-rain resistant layer are established in a single operation. Maximum free anchor length: 25 mm (observed in test configuration).
- 4

Install Window
Window is installed onto the defined connection plane. The full connection depth — including guide rail zone — is covered by the system. The resulting connection is specifiable, repeatable and verifiable.

APPLICATION FIELDS

- **Residential renovation:** Window replacement in existing masonry with irregular, mixed or unknown substrate conditions in the reveal zone.
- **Commercial and public buildings:** Projects where documented, certifiable connection quality is required for planning approval, tender specification or liability purposes.
- **Serial renovation programmes:** High-volume window replacement where process consistency, installation speed and reproducible quality across all units are operationally critical.