

PRIVASEE®

SMART FILM BROCHURE

PDLC privacy glazing for retrofit and architectural projects

Switchable transparency · UK-engineered · 6-SKU FM family.

DOCUMENT CODE

MKT-01 · Rev 1.0

ISSUED · 2026-05-06 CLASSIFICATION · INTERNAL DRAFT

01 PRIVASEE® Smart Film at a Glance

[HERO IMAGE — Smart Film installed in flagship project]

founder to place — PowerPoint · 178×90 mm

WHAT IT IS

PRIVASEE® Smart Film is a low-voltage AC-driven PDLC (Polymer Dispersed Liquid Crystal) film that switches between opaque and clear in less than 0.5 second. Apply it to existing glass (Adhesive variants) or laminate it inside new glazing (Non-Adhesive variants). One product family, two installation paths.

WHO IT IS FOR

Architects designing privacy-on-demand glazing. MEP consultants specifying smart glazing into new builds. Glazing fabricators laminating PDLC into IGU. Interior designers retrofitting existing glass. Hotels, clinics, executive offices, residential premium projects.

02 The 6-SKU FM Family

SKU	GRADE	THICKNESS	TYPE	MAX WIDTH	BEST FOR
FM-T91-16-A	T91 Premium	16 µm	Adhesive	1.8 m	Premium retrofit
FM-T91-12-A	T91 Standard	12 µm	Adhesive	1.8 m	Standard retrofit
FM-T85SL-12-A	T85 SL Specialist	12 µm	Adhesive	1.8 m	Large-panel low-shrinkage
FM-T91-16-N	T91 Premium	16 µm	Non-Adhesive	2.2 m	Premium new-build laminated
FM-T91-12-N	T91 Standard	12 µm	Non-Adhesive	2.2 m	Standard new-build laminated
FM-T85SL-12-N	T85 SL Specialist	12 µm	Non-Adhesive	2.2 m	Specialist large laminated

ADHESIVE (FM-...-A) — applied to clean dry existing glass on site. Maximum width 1.8 m. Retrofit-friendly. NON-ADHESIVE (FM-...-N) — laminated between two panes of glass with EVA in autoclave. Maximum width 2.2 m. New-build / glazing fabricator route.

03 Headline Performance

PROPERTY	TYPICAL VALUE
Switching speed	< 0.5 s opaque ↔ clear
Visible Light Transmission (VLT) — clear	≥ 75 %
VLT — opaque	≤ 5 %
Haze — clear state	≤ 6 %
Operating voltage range	Low-voltage AC (drive-managed)
Power consumption — clear state	≈ 5 W / m ²
Power consumption — opaque state	≈ 0 W (PDLC reverts to opaque on power-off)
Operating temperature	-20 °C to +60 °C
UV stability	Standard (≥ 5 yr) · Premium (≥ 7 yr) [VERIFY per SKU]
Useful life	7-10 years typical
Approvals	CE · UKCA · IEC compliance for drive

All values are typical. Per-SKU verified specifications are in the per-SKU datasheets PVS-SGS-DAT-FM-* (Quick + Detailed pairs).

04 Where it's Used

Hospitality

Hotel guest-room bathrooms · restaurant private dining · spa treatment rooms · executive lounge partitions.

Healthcare

Clinical consultation rooms · operating-theatre observation panels · ward ensuites · imaging room privacy.

Commercial

Open-plan office partitions · meeting-room glass walls · executive corner offices · reception privacy.

Residential

Master bath ensuite · home office on/off privacy · double-aspect bedroom glazing · pool-house separation.

Retail

Premium fitting rooms · jewellery showcase backdrop · pharmacy consultation booths.

05 Reference Project Gallery

Photo placeholders below — final external publication requires per-project naming consent (RTA · ADGM · Dubai Police · Sobha) before specific project names appear.

[REFERENCE 1 — project name pending consent]

founder to place — PowerPoint · 86×90 mm

[REFERENCE 2 — project name pending consent]

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[REFERENCE 3 — project name pending consent]

founder to place — PowerPoint · 86×90 mm

[REFERENCE 4 — project name pending consent]

founder to place — PowerPoint · 86×90 mm

06 Installation Summary

ADHESIVE (FM-...-A) — RETROFIT

1. Clean glass to optical level (IPA + microfibre). 2. Wet-application using fitter's solution. 3. Squeegee from centre out. 4. Trim edges, seal with TOSSEAL 381. 5. Run busbars to power drive. Approx 1 m² per fitter per 30 min.

NON-ADHESIVE (FM-...-N) — LAMINATED

Fabricator route. EVA interlayer + PDLC + EVA + glass, autoclaved. Resulting laminated unit has the PDLC fully encapsulated. Same drive-side wiring; busbar exits at edge.

POWER

Pair the panel with a PRIVASEE Power Drive (PJ-C / PJ-D / DZD-NO / DZ6L / CZ / LD-A). See Power Drive Catalogue PVS-SGS-CAT-PD-01 for selection. Drive sized to the panel area: typical 5 W / m² active load.

FULL INSTALLATION DETAIL

TEC-06 Smart Film Installation Manual (currently Blocked — pending founder install sequence + edge-finishing rules).

07 Warranty & Maintenance

TOPIC	DETAIL
Warranty — film	24 months from installation date
Warranty — drive	24 months from installation date
Warranty — remote	12 months
Activation	Single-page registration form with serial + install date
Conditions	Licensed-electrician install · TOSSEAL 381 silicone only · IPA 70 % cleaning only
Cleaning method	Spray small amount IPA 70 % onto lint-free microfibre (NEVER on glass), wipe without pressure
Banned chemicals	Ammonia (Windex) · acidic · alkaline · solvent · abrasive · direct-spray
Lifespan	Useful life 7-10 yr typical · drive ~ 10+ yr · panel replaceable, drive reused
After failure	WhatsApp / email photo + serial → triage < 24 hr → cross-ship from UK or UAE

08 Sustainability & Performance Story

ENERGY

PDLC consumes ~5 W per m² when clear, ~0 W when opaque (it is opaque without power). A typical 1.0 × 2.0 m ensuite panel consumes ~10 W active — comparable to an LED bulb. Specifying smart film for privacy reduces the need for separate blinds + their actuator load.

CIRCULAR DESIGN

The panel and the drive are independent units. The drive typically outlives the film (10+ yr vs 7–10 yr) — at end-of-life the film is replaced and the drive reused. Less e-waste than fully-integrated electrochromic alternatives.

DAYLIGHT BENEFIT

PDLC clear-state VLT ≥ 75 % means the panel passes more daylight than most frosted-glass alternatives. Architects gain privacy on demand without giving up daylight in the privacy default state.

END-OF-LIFE

Film is solvent-recoverable. Drive is repairable / refurbishable in UK and UAE service centres. PRIVASEE accepts return of obsolete drives for recycling at no charge.

09 Why PRIVASEE

■ **Single point of contact**

One supplier for the film AND the power drive — no triangulation between vendors.

■ **Documented integration library**

Per-family Strict + UAE manuals + HA Annex with Schneider RXM2AB1P7 / RXM2AB1BD canonical interface.

■ **UK-engineered · UAE-distributed**

SORS GT UK LTD (Sandbach, UK) + S O R S Reflective LLC (UAE GCC distribution).

■ **Customer-friendly drawings**

Drawings use the labels printed on the housing — INPUT / SWITCH / OUTPUT — not engineering codes the customer has never seen.

■ **CE · UKCA · IEC 60364 compliant**

DEWA / Civil Defence / FEWA / SEWA submission-ready via UAE Local Edition manuals.

■ **PRIVASEE-only TOSSEAL 381 silicone**

Approved silicone for glass-to-frame seal. Other silicones void warranty (LP-003).

10 Next Steps & Contact

REQUEST

Free A6 sample kit (panel + drive + plug) for projects $\geq 10 \text{ m}^2$. Project quote inside 48 hours. Architect site visit on request.

CONTACT

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GCC distribution: S O R S Reflective LLC · UAE

REFERENCED DOCUMENTS

PVS-SGS-CAT-PD-01 — Power Drive Catalogue
PVS-SGS-DAT-FM-* — per-SKU Smart Film Datasheets
TEC-02 — SG-01 Smart Glass Master Document
QUA-01a/b — Smart Film + Smart Glass Warranty (GCC + EU)
TEC-11a/b — Smart Film + Smart Glass Maintenance

11 Revision History

REV	DATE	AUTHOR	CHANGE NOTES
1.0	2026-05-06	Claude (PRIVASEE AI)	Initial issue — Smart Film Brochure. 12 pp PPTX A4 portrait Track A. Photo placeholder rule applied — founder swaps real photos in PowerPoint. Reference project page (5) requires per-project naming consent before live publish.

END OF SMART FILM BROCHURE