TEMPEST-CLASS PHYSICAL-LAYER CONTAINMENT

Hardening the Sensitive Facility.

SecureWrap® — a validated, lightweight electromagnetic shielding platform engineered for SCIFs, SAP spaces, and sensitive facility environments.

MODULAR SCIF | FIXED SCIF | SAP SPACE | TEMPEST



THE SCIF THREAT ENVIRONMENT

Sensitive Compartmented Information Facilities and Special Access Program spaces exist to defeat the physical-layer attack surface: unintentional electromagnetic emanations, RF interception, side-channel exfiltration, and coupling of covert signals into or out of a protected volume.

Traditional accreditation-grade containment — copper mesh, aluminum panelization, conductive coatings, Faraday cages, EMI gasketing — delivers the shielding effectiveness but imposes a heavy cost: multi-year build timelines, thick and mass-intensive assemblies, specialized construction trades, and a permanent, disclosive footprint. A modern threat picture demands **containment quality without the traditional build burden**.

Modular and expeditionary SCIFs, sensitive facility retrofits, and forward-deployed SAP environments increasingly require containment that is **rapid to install, reconfigurable, and visually neutral** — with independently traceable shielding performance in the accreditation-grade regime.

ACCREDITATION-GRADE ATTENUATION

> 100 dB

Independently validated shielding effectiveness **30 MHz through 1.3 GHz**, with a **127.06 dB peak at 50 MHz** under ASTM D4935-10 (Applus+ Keystone Report 2511-235E Rev. A, January 2026) — in the regime SCIF accreditors expect to see.

The GT Optics Approach

GT Optics develops SecureWrap®, a validated, commercially produced, lightweight electromagnetic shielding platform engineered for SCIF, SAP, and sensitive facility environments. Built on **50+ patents** in nanostructures, micro-optics, and micromirror systems, the same material is applied as a flexible film for retrofit or as a conformable coating for new construction — tuned to the frequency profile of the host facility.

The platform is engineered around the four SCIF-relevant application classes: modular / expeditionary SCIF walls, fixed-facility SCIF and SAP-space retrofits, cable and penetration treatment, and TEMPEST-relevant hardening at accreditation-grade attenuation.

ONE PLATFORM · FIVE DOMAINS

DATA CENTERS | SCIFs | AIR & GROUND PLATFORMS | CRITICAL UTILITIES | COMPUTER SYSTEMS

FOUR SCIF APPLICATION CLASSES

APPLICATION	WHAT IT PROTECTS	GT OPTICS CONFIGURATION
Modular & Expeditionary SCIF	Rapidly deployed, redeployable, or expeditionary SCIF/SAP shells where traditional bulk-metal builds are impractical or too slow.	SecureWrap® film applied to wall, ceiling, and floor panels; coating used at compound geometries. Frequency-tuned at the production line.
Fixed SCIF & SAP-Space Retrofit	Existing SCIF and SAP spaces whose accreditation posture, threat profile, or facility footprint has evolved beyond original specification.	SecureWrap® film applied to wall interiors and structural penetrations without demolition of the base assembly. Configuration tuned for the host facility.
Cable & Penetration Treatment	Filtered penetrations, cable trays, and conduit interfaces — the classical RF leak paths that dominate SCIF containment failure modes.	Conformable SecureWrap® film and connector-boot treatments applied to penetrations, filters, and cable assemblies. Integration-specific qualification.
TEMPEST-Relevant Hardening	Emanation-sensitive equipment volumes, secure-conferencing rooms, and TEMPEST-scoped workspaces requiring high attenuation across the operational band.	SecureWrap® film delivering >100 dB attenuation from 30 MHz through 1.3 GHz. Configuration-specific qualification per facility.

WHY GT OPTICS

■ **Accreditation-grade performance.** Independently traceable 127.06 dB peak at 50 MHz under ASTM D4935-10 (Applus+ Keystone Report 2511-235E Rev. A, January 2026); above 100 dB from 30 MHz through 1.3 GHz — the regime SCIF accreditors expect.

■ **U.S. manufacturing, defensible IP.** Engineered, built, and tested in the United States. 50+ patents in nanostructures, micro-optics, and micromirror systems. Aligned to NIST SP 800-171.

■ **Build-burden reduction.** Retrofits existing walls and modular shells without demolishing base construction. Compresses installation timelines and eliminates dependency on specialty metal panelization trades on many jobs.

■ **Same platform, five domains.** The SecureWrap® film and coating system used in SCIFs also spans data centers, air and ground platforms, critical utility infrastructure, and computer / electronic components — a single qualification pathway.

SCOPE DISCIPLINE

GT Optics has not yet completed a formal SCIF accreditation on a live government facility. Independent test data is for the underlying SecureWrap® material under ASTM D4935-10; facility-level accreditation testing is performed at integration with the accrediting authority. No customer-attributed performance figures are presented that GT Optics has not itself measured.

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