FGP FLEXIBLE TRAFFIC SYSTEM

FLEXIBLE SYSTEM FOR ACTIVE SLAB CONDITIONS UNDER TRAFFIC

NOMINAL THICKNESS: 60-70 Mils (1/16")
FINISH: Solid Color Textured Gloss

SYSTEM DESCRIPTION

FGP Flexible Traffic System is designed to accommodate substrate movement while delivering durable performance under pedestrian and vehicular traffic. Its flexible membrane provides crack isolation, absorbs minor slab movement, and helps prevent crack transfer to the finished surface. It offers strong adhesion, high elongation, and a seamless, wear-resistant finish that performs under moderate movement and thermal cycling, reducing cracking and delamination compared to rigid epoxy systems.

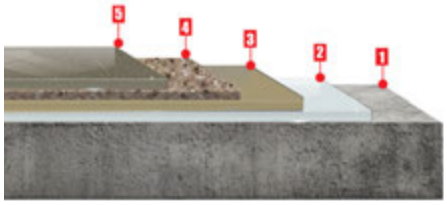
KEY FEATURES

- ☑ Crack isolation reduces transfer of non-structural cracks to surface
- ☑ Flexible membrane accommodates minor substrate movement
- ☑ Enhanced elongation for stress relief under dynamic conditions
- ☑ Maintains adhesion and surface integrity over active slabs
- ☑ Durable wear surface for pedestrian and vehicular traffic
- ☑ Improved resistance to crack propagation versus rigid epoxy systems
- ☑ Supports long-term performance in movement-prone substrates

PERFORMANCE MATRIX

PROPERTY	RATING
DURABILITY	●●●●○
ABRASION RESISTANCE	●●●●○
CHEMICAL RESISTANCE	●●●●○
THERMAL RESISTANCE	●●●○○
FLEXIBILITY	●●●●●
MVE TOLERANCE	●○○○○

SYSTEM STRUCTURE



1	**SUBSTRATE:** Concrete w/ CSP Level 2-4
2	**PRIMER:** Clear HyperFLEX @ 80 Ft²/Gal (20 Mils)
3	**BASECOAT:** Pigmented HyperFLEX @ 80 Ft²/Gal (20 Mils)
4	**BROADCAST:** 20/40 Mesh Silica Sand @ 0.50 Lbs/ Ft² (Full Refusal)
5	**TOPCOAT:** Pigmented Aspartic 100 @ 120 Ft²/Gal (13 Mils)

TYPICAL APPLICATIONS

- Pedestrian Walkways
- Parking Structure Decks
- Parking Garages
- Mezzanines
- Balconies
- Elevated Decks
- Rooftop Decks
- Exterior Walkways
- Catwalks
- Pedestrian Bridges
- Viewing Platforms
- Stadium Concourse Areas
- Stadium Seating Terraces
- Transit Platforms

TECHNICAL PROPERTIES

HARDNESS	ASTM D2240	Shore D 80
TEAR STRENGTH	ASTM D624	236 in-lbs
TENSILE STRENGTH	ASTM D638	2,450 psi
FLEXURAL STRENGTH	ASTM D790	5,000 psi
ELONGATION	ASTM D638	150%
ADHESION	ASTM D7234	400 psi | Concrete Failure
ABRASION RESISTANCE CS-17 WHEEL, 1000G LOAD, 500 CYCLES	ASTM D4060	20 mg loss
IMPACT RESISTANCE	ASTM D2794	200 in-lbs
MVE TOLERANCE	ASTM F1869	3 lbs/1,000 ft²/24 hrs
SLIP RESISTANCE (DCOF)	ANSI 326.3	0.65-0.75
FIRE PERFORMANCE	ASTM E84	Class B
FOOT TRAFFIC		12 Hours
VEHICULAR/EQUIPMENT TRAFFIC		72 Hours
FULL CURE		5-7 Days

*The above physical properties were measured in accordance with the referenced standards. Results may vary based upon statistical variations on mixing methods, equipment, application methods, environment, actual site conditions, and curing conditions. All sample preparation and testing are conducted in a laboratory environment and actual performance on job site may vary from these values based on actual site conditions.

LIMITATIONS

- ☒ Not intended for severe structural movement or active slab failure
- ☒ Not intended for large voids or significant substrate irregularities without repair
- ☒ Not intended as a waterproofing system under hydrostatic pressure conditions
- ☒ Not intended for high-impact industrial abuse or severe point-loading conditions

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REQUIREMENTS

1. Substrate Requirements (General Ranges)

- ☑ **Compressive Strength:** ≥ 3,000 psi (typical minimum)
- ☑ **Tensile Strength:** Sound, structurally stable concrete required
- ☑ **Surface Porosity:** Open, absorptive profile (CSP 2–5 typical depending on system)
- ☑ **Mohs Hardness:** Concrete substrate ~5–7 (no soft, friable surfaces permitted)
- ☑ **pH Range:** 7.0–10.0 (neutral to mildly alkaline acceptable range)
- ☑ **Moisture Vapor Emission (MVER):** 0–25 lbs/1,000 ft^2/24 hrs (system dependent)
- ☑ **In-Slab Relative Humidity:** ≤ 75–95% RH per ASTM F2170 (system dependent)
- ☑ **Contamination:** Free of oil, grease, curing compounds, sealers, and laitance

2. Environmental Conditions

- ☑ **Ambient Temperature:** 60°F – 85°F (ideal working range)
- ☑ **Substrate Temperature:** 50°F – 85°F
- ☑ **Product Temperature:** Condition materials to 65°F – 75°F before installation
- ☑ **Relative Humidity:** ≤ 80% recommended during application
- ☑ **Dew Point:** Substrate must be minimum 5°F above dew point
- ☑ **Ventilation:** Adequate air movement required; avoid stagnant air conditions

3. Surface Preparation Requirements

- ☑ Mechanically prepare substrate via shot blasting, grinding, or equivalent method Achieve specified CSP (Concrete Surface Profile) per system requirement (CSP 2-5 typical)
- ☑ Remove all weak, friable, or contaminated concrete
- ☑ Repair cracks, spalls, and voids prior to system installation
- ☑ Vacuum and remove all dust and debris prior to application

4. Testing & Verification (Recommended)

- ☑ **ASTM F2170** – In-slab relative humidity testing
- ☑ **ASTM F1869** – Calcium chloride MVER testing
- ☑ pH testing of concrete surface
- ☑ Porosity testing of concrete surface to ensure proper profile
- ☑ Mohs Scratch test to verify concrete hardness
- ☑ Infared Thermometer and Hygrometer to verify ambient, product and surface conditions

5. Safety Requirements (PPE & Handling)

- ☑ Wear appropriate PPE: gloves, safety glasses, long sleeves
- ☑ Use respiratory protection where ventilation is limited
- ☑ Avoid skin contact with uncured resins and hardeners
- ☑ Follow all SDS safety guidelines for each product component
- ☑ Keep away from ignition sources where applicable (solvent-based or reactive systems)
- ☑ Ensure adequate ventilation during mixing and application

6. Limitations (General)

- ☑ Review system and product limitations
- ☑ Ensure products and system applied is for designed purpose and suitable for environment
- ☑ Dynamic substrates require application of flexible membrane
- ☑ Performance varies based on substrate condition, environment, and installation quality
- ☑ Not a substitute for proper concrete design, drainage, or structural integrity

MIXING GUIDELINES

- All materials must be mixed in strict accordance with manufacturer-specified ratios.
- Pre-mix each component separately when required, then combine using a low-speed mechanical mixer to ensure uniform consistency without introducing excessive air.
- Mix until color and viscosity are fully homogeneous, scraping sides and bottom of the container during blending.
- Do not vary mix ratios, thin materials, or introduce unapproved additives.
- Only mix quantities that can be installed within the stated pot life.
- Mixed material should be used immediately and not re-tempered or reconstituted after initial gel or viscosity increase.

COVERAGE RATE, WORKING TIMES & POTLIFE GUIDELINES

Coverage Rate

- Theoretical coverage based on ideal substrate conditions
- Varies with surface profile (CSP), porosity, and absorption rate
- Affected by application method, film thickness, and installer technique
- Jobsite conditions may significantly reduce or increase actual yield
- Allow for appropriate waste factor and overage on projects

Working Time (Open Time)

- Usable application window after material is placed on substrate
- Temperature-dependent (higher temps = shorter working time)
- Humidity and substrate temperature accelerate set and cure
- Product must be placed and finished within working window
- Do not rework material once it begins to gel or lose flow

Pot Life

- Time mixed material remains usable in the container
- Highly dependent on ambient temperature and batch size
- Larger mix volumes reduce pot life due to exothermic heat buildup
- Material must be installed immediately after mixing
- Do not re-temper, re-thin, or attempt to extend pot life once reaction begins

General Disclaimer

- All values are approximate and for guidance only
- Field conditions will directly impact coverage, working time, and pot life
- Installer is responsible for monitoring material condition during application
- Exceeding pot life or working time may result in poor cure or adhesion failure
- Always follow technical data sheets and approved installation procedures
- Manufacturer is not responsible for failures due to improper mixing or installation practices

APPLICATION GUIDELINES

- Use only approved primers and system components
- Maintain proper coverage rates and film thickness by using specified tooling and application equipment
- Refer to individual product Technical Data Sheets (TDS) for specific application procedures, cure schedules, and installation requirements
- Do not exceed recommended recoat windows
- Ensure uniform application without puddling or dry spots
- Broadcast aggregates (if applicable) to rejection as specified after 10-15 minutes depending on temperatures
- Do not overwork product or exceed working time limits

CLEANING & MAINTENANCE GUIDELINES

- Use pH-neutral cleaners for routine maintenance
- Avoid harsh solvents, caustic cleaners, or abrasive pads unless approved
- Remove spills promptly to reduce staining or surface degradation
- Use non-metallic scrub pads or soft-bristle cleaning equipment where applicable
- Establish a routine cleaning schedule based on traffic and exposure conditions
- Avoid prolonged exposure to standing water, harsh chemicals, or abrasive debris
- Protective pads are recommended beneath heavy equipment or movable fixtures where applicable
- Periodic inspection and maintenance are recommended to preserve long-term appearance and performance
- Reapplication of finish or topcoat layers may be required over time due to traffic, abrasion, UV exposure, chemical exposure, or general wear to maintain coating performance and surface protection

SPECIFICATIONS

- Must be installed by trained and approved applicators
- All substrate conditions must meet specified requirements prior to installation
- Deviations from system design require written approval
- System performance is dependent on substrate preparation and environmental conditions

FIELD VARIABILITY

- Color, texture, gloss, and overall appearance may vary due to substrate conditions, application methods, ambient environment, and lighting.
- Minor variations between batches, production runs, or installation areas are inherent to resinous flooring systems and are not considered defects.
- Final appearance may also be influenced by concrete porosity, surface preparation, and jobsite conditions at the time of installation.

WARRANTY & LIABILITY DISCLAIMER

- System performance is dependent on proper installation and site conditions
- Manufacturer is not responsible for substrate failure or improper preparation
- No warranty is implied beyond published technical data
- Installer assumes responsibility for substrate evaluation and suitability
- Field conditions may affect final appearance and performance