Product Data Sheet

PLATFORM™ PERFORMANCE FLOORING SYSTEMS
A KEENE INC. COMPANY

3 DIVISION

Cast Underlayment
03 54 00

Hydraulic Cement Underlayment
03 54 16

Platform L3™

Synthecem™ technology

Polymer-Modified Synthecem™ Portland Cement Self-Leveling Underlayment

PACKAGING

- 50 lb (22.7 kg) double wall bag

SUITABLE SUBSTRATES

PLATFORM L3 is designed for use over:

- Concrete, concrete plank
- Existing patching and leveling materials
- Sound gypsum
- Steel pan
- Corrugated steel deck
- Cement or epoxy terrazzo
- Well bonded existing flooring such as VCT, ceramic tile
- Qualified adhesive residue (non soluble, non PSA)
- Min. 5-day-old green concrete with underslab vapor barrier

Platform L3™, powered by Synthecem™ portland cement technology, is a premium, high-flow self-leveling underlayment for correcting uneven or damaged floors in residential, commercial, and institutional environments. It is not a vapor barrier. L3 creates a smooth, durable surface that enables rapid flooring application in as little as 12 hours, and its high strength provides exceptional resistance to wheel tracking common in self-leveling underlayments.

Features

- Foot traffic in 3-4 hrs after placement; Trade traffic in 12 hrs after placement
- No mechanical preparation of concrete for pedestrian traffic and light commercial applications.*
- Will not support mold growth
- Optimized for installation from 1/8” to 2” + NEAT in a single lift.
- Compatible with select sound attenuation systems
- Suitable for under floor heating systems, electrical & hydronic
- Can be tapered at edges to meet existing floor elevations

Properties

Compressive Strength	>5000 psi (ASTM C109 Modified – Air Cure)
Working Time	15-20 Minutes
Time to foot traffic	2-3 hours
Time to flooring	Breathable Flooring: 1” depth - 16 hrs to flooring Non Breathable Flooring: <1/2” depth - 24 hrs to flooring
Application Conditions	50ºF to 90ºF (10ºC to 32.2ºC)
Flammability	Flame Spread 0, Smoke Development 0 Acceptable for use on UL Fire Rated Floor Assemblies*
Coverage*	50 lbs - Approx. 25 sq ft @ 1/4”
Water per 50lb unit	4.5 – 5 qt per 50 lbs (4.25 – 4.73 L per 22.7 kg)
Density	120 - 130 lbs/cu ft
Shelf Life	12 Months when unopened & stored per intsructions
Color	Gray

All specifications were tested in laboratory conditions: 73ºF in a controlled environment using our approved water content. Changing the temperature, or mixing ratios, or the environment can effect these specifications. Call Technical Services if you have any questions.
**Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions, type of equipment, thickness applied and application methods used.*

LEED Credit Platform L3 may contribute to LEED certification of projects as follows:

AREA	CREDIT	CATEGORY	HOW
Indoor Environmental Quality	EQ 4.2	Low Emitting Materials	VOC content 0g/l (calculated)
Building Reuse	MR 1.1, 1.2	Maintain	Provides new, pristine subfloor
Materials & Resources	MR 4.1, 4.2	Recycled Content	0%
Regional Manufactured Material	MR 5.1, 5.2	Regional Materials	>50%

General Guidelines

This product is designed for application and use in dry, properly prepared interior environments only. Address sources of water exposure prior to installation and avoid installation in environments where ongoing moisture exposure is likely.

Do Not Use:
Where hydrostatic pressure (water) is present or moisture emissions exceeds level permitted for finished floor covering. If the floor covering's moisture permeability does not meet or exceed the moisture content of the slab, Platform recommends moisture remediation. Use Platform EMS, or an approved alternative, to remediate moisture in concrete. Consult the Platform EMS data sheet, or call technical services, for more details.

- Where surface or ambient temperature falls to or below 50°F 72 hours before or after installation.
- For regular trade traffic less than 16 hours after application
- As a trafficable surface without coating with a suitable film forming material
- Over presswood, particle board, masonite, chipboard, single stripwood floors, luaun or similar dimensionally unstable materials susceptible to moving or swelling.
- Exterior, exposed applications or as a wear surface.

Preparation & Application

Reference the floor covering and adhesive manufacturers documentation to verify suitability of Platform L3 as a subfloor for the flooring system (any adhesive used for concrete is generally suitable for L3).

Moisture Assessment: Platform L3 is not a moisture barrier and will allow moisture to pass through to the finished flooring. All substrates are to be interior, dry and free from ongoing moisture and water penetration through leaks, damage or other.

Refer to all installation instructions, ASTMs (F710, F1869, F2170 & F3010, C1708, etc.) and all industry best practices.

Honor all moving joints. Complete crack and substrate repairs prior to installation. Consult an engineer for required joints and crack repairs prior to installation. Contact Technical Services for required surface preparation on installations that will be exposed to high rolling loads or high point loads. Maintain a minimum of 50ºF during the pour and for 72 hours after the pour. Acclimate the material to a minimum of 55ºF prior to mixing. To maximize flowability and working time, utilize cool water when temperatures exceed 85ºF.

For installation over hydronic or electrical heating systems, utilize a minimum of 3/4" of material above the surface of the heating system.

Platform L3 is compatible with and accepts the direct application of urethane, moisture cure, and other typical floor covering adhesives.

Platform L3 can be applied to a maximum depth of 2" NEAT monolithically and up to 3" deep NEAT in isolated areas.

Platform L3 can be tapered at the edges to meet existing floor elevations when properly prepped and primed with Platform P360. Where further edge smoothing is needed, utilize Platform FP trowelable flooring underlayment patch to perfectly feather the edges.

Extension: Platform L3 may be poured NEAT up to 3" deep in confined areas. When pouring areas that exceed 50 sq ft and 2.25" - extend with aggregate. All pours deeper than 3" require aggregate extension regardless of area. When extending utilize up to 50% by weight (25 lbs pea gravel per 50 lb bag) 1/4" - 3/8" clean, washed and surface dry (SSD) pea gravel. Ensure pea gravel is thoroughly mixed in (encapsulated) by the L3. Contact Technical services for details. Do not increase the maximum specified water addition when extending with sand or stone.

Multiple Lifts: When installing multiple lifts of L3, wait for the first lift to dry (see table) and prime with P360.

Surface Preparation

All Substrates must be sound, clean, dry and free of contaminants (oil, dirt, laitance etc.) that may interfere with adhesion. Areas of the floor that do not exhibit a tensile pull strength greater than 100 psi are not suitable and must be mechanically removed to a sound, stable base and subsequently repaired prior to application of Platform L3. Do not use solvents, acids, chemical adhesive removers to prepare the substrate. All bond breaking substances (cure residues, excess salts from silicates etc.) must be removed prior to priming.

Gypsum Substrates
Gypsum substrates must exhibit a sound surface free from dusting, chalking and surface weakness. Repair weak, soft and dusty Gypsum prior to application of L3 using a recommended Platform gypsum repair solution.

Wood Substrates
Wood floors must satisfy local building codes, utilize exterior grade plywood, suitable OSB or other resistant to water, and be free from deflection. Due to the high material strength of L3, special care and attention must be given to ensure deflection of wood does not exceed L/720. The wood must be free of contaminants (oils, wax, dirt etc.) that could function as bond breaker prior to application of the primer.

Platform requires use of industry standard plastic or metal lath when installing L2 at less than 1/2" depth. over wood subfloors, or when applying L3 over wood floor assemblies that do not meet the requirements for a lath-free installation.

Reference Technical Bulletins (Platformperformance.com) for applications over wood that do not require the use of lath, or contact technical support for details.

When applying Platform L2 on wood substrates, prime NEAT with Platform P360 using a 3/8" nap roller to form a complete film of P360 over the substrate. Utilize reinforcing lath mechanically fastened to the wood floor after priming.

Adhesive Residue
Non-soluble adhesives must be scraped to a well bonded residue. Water soluble and pressure sensitive adhesives must be removed mechanically to the substrate (Contact Technical services for details). Verify type of adhesive prior to mechanical removal to ensure adhesive containing asbestos is not introduced into the environment. Follow all local, state and federal laws for removal and disposal of adhesive or flooring materials containing asbestos.

Platform L3 is not for use as a suitable means to encapsulate residue of hazardous materials.

Priming

Platform L3 is very flowable and will flow through any exposed voids. To avoid material flow in undesirable areas, seal voids or penetrations with a rapid setting patch such as Platform FP or GP or expanding foam.

Prime properly prepared substrates with Platform P360 prior to the application of Platform L3.

Turn HVAC units off for installation and the first 16-24 hours of material cure. Maintain air circulation to assist in drying, however avoid direct airflow across the surface of the material for 16-24 hours. Avoid exposure to direct sun during the application.

Non-Porous/Non-Absorbent
Wood, Adhesives, Epoxy, Epoxy Terrazzo, some existing floor finishes or other non porous materials: Prime NEAT (undiluted) without puddles using a 3/8" Nap Roller.

Porous/Absorbent
Standard Porous Concrete: Dilute Platform P360 at a 2:1 (W:P) ratio, pour onto substrate, broom in thoroughly for 5-8 minutes with an exploded tipped broom, then sweep off excess material to a thin film. Allow primer to dry 1-2 hours before proceeding. High Porous or Gypsum Concrete: Requires DOUBLE priming. Apply methods above with a first coat diluted at 3:1 (W:P) and the second coat diluted at 2:1 (W:P) to achieve the same thin film. Allow primer to dry 1-2 hours before proceeding. Reference Platform P360 data sheet for additional details.

Mixing

Mix Ratio:
4.5 - 5 quarts per 50 lb bag

Mix Time:
2 min with 650+ rpm drill or through approved mixer/pump

Variable Water Ratio:
Utilize 5 quarts water per 50 lb bag to achieve high flow and flat floors. Reduce water addition down to 4.5 quarts per 50 lb bag for ramping applications. Stay within designated water ratio.

Over-watering and/or under mixing (failing to generate adequate shear) will result in lower ultimate compressive strengths.

Add designated clean, potable water to a clean mixing barrel, then gradually add the powder and mix at the designated speed for 2 minutes. Ensure all material is homogenous, and no dry lumps or unmixed material is at the bottom of the mixing barrel. While mixing, keep the paddle below the surface of the material to reduce introduction of excess air into the mix. Once mixed, immediately pour onto the substrate to maximize material flow and placement time.

Platform L3 may be mixed and/or pumped with most standard batch or inline mixing/pumping equipment. Contact Technical services for pump questions.

Material Application

Immediately after mixing is complete, pour the Platform L3 on the substrate, rake to the required depth, and smooth using appropriate tools (smoother or porcupine roller). When placing newly mixed material, maintain a wet edge, always pouring back into the leading edge of the previous placement.

Drying Time

Do not used forced air to assist in drying Platform L3 during application, but do provide adequate ventilation (venting) and continuous circulation of air in application area. Platform L3 generally hardens to accept light foot traffic 3-4 hours after placement. Avoid construction traffic for a minimum of 12-16 hours (temperature dependent).

Platform L3 requires suitable conditions for drying, do not wet cure or use curing or sealing compounds. Do not introduce heavy airflow to the surface of Platform L3 until after 16-24 hours of drying. Depth of application, water utilized in mixing, ambient temperature, humidity, and airflow all impact drying time. Reduced water, higher temps and great airflow will enhance drying performance.

The use of a moisture meter is recommended to verify readiness for flooring. Multiple areas should be surveyed to ensure dryness throughout. The PROTIMETER Surveymaster® or Aquant®, the Delmhorst Navigator® BDX Series, and the Tramex CME5 or CMEX5 are all acceptable for use to indicate suitable dryness for any floor covering. In all cases, floor covering and adhesive manufacturers recommendations, supersede all others.

General drying guidelines assuming ambient temps of 70ºF with continuous air circulation:

Breathable Flooring Systems
For applications up to 1", install breathable flooring systems after 16 hours.
Add an additional 24 hours of dry time for EACH additional 1" of material depth.

Non-Breathable Flooring Systems
For applications at 1/2", install non-breathable flooring systems after 24 hours. Add 24 hours of dry time for EACH additional 1/2" of material depth.

Platform L3 dries to a hard, dense surface. Prime cured Platform L3 prior to application of cementitious adhesive or patch as per manufacturers specifications. In all cases, floor covering and adhesive manufacturers recommendations, supersede all others.

Clean-Up & Disposal

Wash hands and tools with water before the material hardens, or within 10 minutes of material contact to ensure easiest removal. Cured material must be removed mechanically. Dispose waste or excess material in accordance with all local, state and federal regulations. Hardened material is generally considered construction waste.

Storage

Store in cool and dry conditions out of direct sunlight with pallets wrapped in original shrinkwrap.

References

ASTM F1869: Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride

ASTM F2170: Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes

ASTM F-710: Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring

ASTM C1708: Standard Test Methods for Self-leveling Mortars Containing Hydraulic Cements

LIMITED WARRANTY

Platform Performance Flooring Systems warrants to the initial purchaser only that the goods sold hereunder will be free from defects in material and workmanship and, except as otherwise set forth herein, will conform to the specifications provided. If any failure to meet this warranty appears within one year from the date of shipment of the goods, on the condition that Platform Performance Flooring Systems will correct any such failure by either replacing or repairing any defective goods, at Platform Performance Flooring Systems' option. The preceding paragraph sets forth the exclusive remedy for all claims based on failure of or defect in the goods sold hereunder, whether such failure or defect arises before or during the warranty period and whether a claim, however instituted, is based on contract, indemnity, warranty, tort (including negligence), strict liability or otherwise. The forgoing warranty is exclusive and is in lieu of all other warranties whether written, oral, implied or statutory.

24 HOUR EMERGENCY: CHEMTREC®

1-800-424-9300

NON-TOXIC and NON-FLAMMABLE

Keep container closed and keep away from children. May cause slight eye abrasion or irritation if spilled or rubbed in eyes. Flush thoroughly with water.

If taken internally, call a physician.

Published technical data & instructions are subject to change without notice. Please contact Platform Performance Flooring Systems for the most current technical data, safety data & application instructions.

Technical Assistance:
Visit our website: platformperformance.com or call

1-800-227-3434

Phone: 877-514-5336

DEP_568972_0226