# **Platform L2**

## **Self-Leveling Underlayment**

#### **Division 3**

03 54 00 Cast Underlayment 03 54 16 Hydraulic Cement Underlayment

#### Suitable Substrates

(well bonded, clean, dry, sound and stable)

Concrete, concrete plank
Existing patching and leveling
materials
Sound gypsum
Steel pan
Cement or epoxy terrazzo
Well bonded existing flooring such
as VCT, ceramic tile
Qualified adhesive residue (non
soluble, non PSA)

#### LEED

Platform L2 may contribute to LEED certification of projects as follows:

## Indoor Environmental Quality

Low Emitting Materials VOC content 0g/l (calculated)

Compliance tested to California Department of Public Health (CDPH/EHLB/ Standard Method) V 1.2 - 2017

#### **Building Reuse - Maintain**

MR 1.1, MR 1.2 Provides new, pristine subfloor

#### **Materials and Resources**

MR 4.1 - 4.2, 5.1, 5.2 Regional Manufactured Cleveland, OH Regional Materials >50% Platform L2 with Synthecem portland cement technology is an innovative self-leveling underlayment that features variable water ratio to facilitate leveling and ramping (1/4" in 24"). L2 is designed to address out of level or old damaged floors in residential, commercial, institutional and renovation environments. Platform L2 dries to a smooth hard surface that facilitates rapid application of flooring goods in as little as 16 hours. Platform L2's exceptional volume stability and bonding characteristics facilitate application in light foot and commercial traffic areas without requiring mechanical preparation of the substrate. Suitable for application over clean, sound substrates including concrete, gypsum, wood, corrugated steel deck. L2 may also be used over well bonded adhesives. L2 is optimized for installation from 1/4" to 2" + NEAT in a single lift, in climate controlled interior environments. Platform L2 offers compressive strengths exceeding 4100 psi (28 days) and is compatible with sound attenuation systems.

## **Features**

- Hydraulic cement underlayment powered by cement based Synthecem technology
- Typically requires no mechanical preparation of concrete substrates for pedestrian traffic and light commercial applications.\*
- Optimized for installation from 1/4" to 2" + NEAT in a single lift.
- May typically be exposed to foot traffic in 3 - 4 hours after placement and trade traffic 16 hours after placement. Cool Temperatures will slow dry time and strength development.

- Suitable for installation prior to interior
- Smooth, hard surface is compatible with a wide variety of flooring adhesives, and suitable for all kinds of finished flooring goods such as vinyl, LVT, carpet, engineered wood, ceramic and more.
- · Will not support mold growth

build outs.

- Suitable for under floor heating systems, electrical and hydronic
- Suitable for installation over a wide variety of substrates
- Compatible with some sound attenuation systems

\*Contact Technical services to verify requirements for your commercial application

## Properties (tested @ 73°F)

•		
Compressive (ASTM C109M) (Modified – Air Cure)	24 hours 7 days 28 days	>1200 psi >2500 psi >4100 psi
Placement time	15 mins	
Time to foot traffic	3 - 4 hours	
Time to flooring	Breathable Flooring Non-Breathable Flooring	<1" depth wait 16 hours* <1/4" depth wait 24 hours* *for greater depths see tables in section; "Drying Time"
Temperature for application (material and ambient)	Adjust temperature of material by using warm or cold water for mixing	50°F to 90°F
Density	120 - 130 lbs/cu ft.	
Flammability	Flame Spread 0, Fuel Contrib	oution 0, Smoke Development 0
Yield	50 lbs	0.44 ft <sup>3</sup> (low water) - 0.48 ft <sup>3</sup> (high water)
Coverage	50 lbs	Approx. 22 - 25 ft <sup>2</sup> @ 1/4" substrate dependent
Water per 50 lb unit	4.25 - 4.75 US Quarts per 50 (4 - 4.5 Liters per 22.7 kg.)	lbs.
Packaging	50 lbs (22.7 kg)	
SKU	PL250	
Shelf life	12 months when unopened a	ind stored per instructions
SKU	PL250	nd stored per instructions



#### **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.
- Install between 50°F 90°F
- For installation in enclosed, climate controlled buildings
- Keep dry and above 50°F for 72 hours after installation
- Avoid exposure to regular trade traffic for 24 hours after application
- Not for use as a permanent wear surface.
- Installation must conform to applicable local, state and federal building codes.

## **Storage**

Store in cool and dry conditions, out of direct sunlight with pallets wrapped in original shrink wrap.

# Clean-up and 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.

#### 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



## **Application Procedures**

#### FOR PROFESSIONAL USE ONLY

Reference the floor covering and adhesive manufacturers documentation to verify suitability of Platform L2 as an underlayment for the flooring system (any adhesive used for concrete is generally suitable for L2).

**Moisture Assessment:** Platform L2 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.

**Installations Above Grade:** Breathable flooring finishes; Platform L2 may be installed with RH levels up to 99%. Non breathable flooring finishes; Substrate exceeding 90% RH require moisture mitigation conforming to ASTM F3010.

**On Grade:** On grade installations must have a effective vapor barrier and not exceed 75% RH (ASMT F2170) or 3 lbs MVER (ASTM FI 869). If readings exceed the requirements above, utilize Platform EMS or alternate that conforms to ASTM F3010.

In all cases, the system utilized is subject to the requirements of the finished flooring and/or the adhesive used.

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 50°F during the pour and for 72 hours after the pour. Acclimate the material to a minimum of 55°F prior to mixing. To maximize flowability and working time, utilize cool water when temperatures exceed 85°F.

For installation over hydronic heating systems utilize a minimum of 1.5" of material, with \(^3\)\circ\" of material above the hydronic system. Platform L2 is compatible with and accepts the direct application of, urethane, moisture cure and other typical floor covering adhesives.

Platform L2 can be applied to a maximum depth of 2" NEAT monolithically and up to 3" deep NEAT in isolated areas.

**Extension:** Platfrom L2 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 L2. 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 L2, 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 L2. 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.

Completely vacuum all dust and debris from the substrate prior to priming with designated Platform primer. Gypsum substrates must exhibit a sound surface, be free from dust and surface weakness prior to application of the primer.

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 L2 is not for use as a suitable means to encapsulate residue of hazardous materials.

Wood floors must satisfy local building codes, utilize exterior grade plywood, suitable OSB or other resistant to water, and be free from deflection. 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 reinforcing lath (such as Keedelath HC or galvanized metal lath) when installing L2 at less the ½" depth over wood subfloors, or when applying L2 over wood floor assemblies that do not meet the requirements for a lath free installation. Reference Technical Bulletins (FloorPrep.com) for applications over wood that do not require the use of lath, or contact technical support for details.

## **Substrate Priming**

Prime properly prepared substrate with Platform Primer P360 prior to the application of L2. Prime properly prepared porous (concrete) and non-porous substrates (adhesive residue, epoxy terrazzo, ceramic tile etc.) with Primer P360 by soft tipped broom (porous) or 3/8" nap roller (non-porous). Carefully read Primer data sheet to ENSURE Primer is utilized diluted (porous substrates) or undiluted (non-porous substrates) per given substrate.

Platform L2 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 or expanding foam. L2 has tremendous bonding properties, place tape or bond breaker on vertical surfaces that will contact the Platform L2. Provide a barrier between Platform L2 and metallic construction (e.g. heating pipes).

## **Technical Support**

Contact 1-800-227-3434

### **Precautions**

Read and follow all precautions and warnings indicated on the product label and on the product Safety Data Sheet (SDS) available at profloorprep.com

## **Limited Warranty**

Dependable, LLC 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 Dependable, LLC. will correct any such failure by either replacing or repairing any defective goods, at Dependable, LLC's 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.

When applying Platform L2 on wood substrates double prime with Primer 360 NEAT and utilize reinforcing lath mechanically fastened to the wood floor after priming.

## **Mixing**

Water:  $\overline{4}.25 - 4.75$  US Quarts (4 - 4.5 L) per 50 lbs. (22.7 kg) Mix Time: 2 minutes with minimum 650 rpm drill or through pump.

Variable Water Ratio: Utilize 4.75 US Qts (4.5L) water per 50 lb bag to achieve high flow and flat floors. Reduce water addition down to 4.25 US Qts. (4 L) 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, 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. During mixing, keep the paddle below the surface of the material to reduce introduction of excess air into the mix. Once mixed, pour onto the substrate immediately to maximize material flow and placement time.

## **Pumping**

Platform L2 may be mixed and/or pumped with most standard batch or inline mixing/pumping equipment. Contact Platform Technical services for pump questions.

## **Material Application**

Immediately after mixing is complete pour the mix on the substrate, rake to the required depth and smooth using appropriate tools (smoother or porcupine roller). When placing 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 L2, but do provide for adequate ventilation and circulation of air. Platform L2 generally hardens to accept light foot traffic 3 - 4 hours after placement. Avoid construction traffic for a minimum of 16 - 24 hours (temperature dependent).

Do not wet cure or use curing or sealing compounds. To facilitate drying, ensure rooms where L2 is installed have air circulation. Do not introduce heavy airflow to the surface of L2 until after 16-24 hours of drying. Temperature, humidity and airflow will impact drying time. The use of a moisture meter is recommended to verify readiness for flooring. Multiple areas should be surveyed to ensure dryness throughout. Use of a Delmhorst BD-2100 or G-79 and a reading of 5% moisture content or lower, or a GE® Protimeter moisture meter such as the Aquant. In the RF (Radio Frequency) mode a ready of 180 or lower indicates suitable dryness for any floor covering.

General drying guidelines assuming ambient temps of 70°F with air circulation (Cooler temperatures and/or high humidity will increase drying times);

#### **Breathable Flooring Systems**

Depth	Dry time required before installing flooring
0 - 1"	16 hours (next day)
1 - 2"	36 hours (1.5 days)
2 - 3"	60 hours (2.5 days)

#### Non-Breathable/Impervious Flooring Systems

Depth	Dry time required before installing flooring
0 - 1/4"	24 hours
1/4 - 3/4"	48 hours
> 3/4"	48 hours plus 36 hours for each additional 1/2'

## **Required Priming Prior to Patch or Thinset**

Internal testing of the latest generation of high performance underlayments including L2 indicates bond of cementitious adhesives like thinset and patch is significantly enhanced with the use of a primer. When utilizing cementitous patch or adhesives (thinset) ensure the Platform L2 is dry and primed with P360 (or equivalent acrylic primer diluted 3:1 (water:primer). Apply P360 by soft tip broom, fully wetting out the surface and broom out any puddling. Allow the P360 to dry to touch before applying thinset, patch or flooring adhesives.

