# Platform L3

# High Flow, High Strength 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
Non-soluble, non PSA adhesive
residue

#### **LEED**

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

## Indoor Environmental Quality

EQ 4.2

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% Polymer modified, engineered self-leveling underlayment incorporating next generation Synthecem™ portland cement technology. Synthecem combines a proprietary blend of cements to form a rapid hardening, high strength, shrinkage free binder system. Synthecem portland cement based technology delivers robust low prep installations.

Platform L3 is a premium high flow self leveling underlayment to address out of level or damaged floors in residential, commercial and institutional environments. Platform L3 provides a smooth hard surface that facilitates rapid application of flooring goods in as little as 12 hours. Platform L3's high strength and hard surface provide exceptional resistance to wheel tracking common to self leveling underlayments (SLU's). Suitable for application over clean, sound substrates including concrete, gypsum, wood, corrugated steel deck. L3 may also be used over well bonded adhesives. L3 is optimized for installation from 1/8" to 2+" NEAT in a single lift, in climate controlled interior environments. A hydraulic cement underlayment, Platform L3 offers compressive strengths exceeding 5000 psi (28 days) and withstands light trade traffic after 12 hours of cure.

## **Features**

- Typically requires no mechanical preparation for pedestrian traffic and light commercial applications\*
- Suitable for installation from 1/8" to 2+" NEAT in a single lift
- Optimal placement time, and may generally be exposed to foot traffic 3 -4 hours after placement
- Hard surface withstands foot traffic within hours and trade traffic in 12 - 16 hours
- Suitable for installation prior to interior build outs



- 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
- Suitable for under floor heating systems, electrical and hydronic
- Compatible with some sound attenuation systems
- High strength and material hardness resist wheel tracking

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

# Properties (tested @ 73°F)

(100101 (100101 (1011)		
Compressive Strength (ASTM C109)	24 hours 7 days 28 days	>1200 psi >2500 psi >5000 psi
Placement time	15 - 20 mins	
Time to foot traffic	3 - 4 hours	
Time to flooring	Breathable Flooring Non-Breathable Flooring	<1" depth wait 16 hours* <1/2" 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	ution 0, Smoke Development 0
Yield	50 lbs	0.48 cu ft
Coverage	50 lbs	Approx. 23 sq ft @ 1/4"
Water per 50lb unit	4.5 - 5 US qts per 50 lbs 4.25 - 4.73 l per 22.7 kg	
Packaging	50 lbs (22.7 kg)	
Shelf life	12 months when unopened a	nd stored per instructions



## **General Guidelines**

- This product is designed for application and use in dry, properly prepared interior envi ronments 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 16-24 hours after application
- Suitable for use as a trafficable surface ONLY when coated with a suitable film forming coating. Contact Technical Services for details
- 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 L3 as a subfloor for the flooring system (any adhesive used for concrete is generally suitable for L3). Follow the directions of the flooring and adhesive manufacturer to determine the maximum allowable moisture content (RH) or Moisture Vapor Emission Rate (MVER) of the substrate. If the moisture content (ASTM F-2170) or Moisture Vapor Emission Rate (MVER) (ASTM F-1869) of the substrate exceeds the requirements of the flooring system, utilize an approved 100% epoxy moisture vapor mitigator *prior to installation* of the Platform L3.

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 50°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  $\frac{3}{4}$ " of material above the hydronic 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 3" NEAT in isolated areas.

**Extension:** Extend L3 with aggregate in larger areas that exceed 2", and in all applications deeper than 3". When extending, utilize up to 50% by weight (25 lbs pea gravel per 50 lb bag) 1/4" - 3/8" clean, washed and surface saturated dry (SSD) pea gravel. Ensure pea gravel is thoroughly mixed in (encapsulated) by the L3. Contact Technical services for details.

**Multiple Lifts:** When installing multiple lifts of L3, wait for the first lift to dry adequately (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 or 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.

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 from 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.

Wood floors must satisfy local building codes, utilize exterior grade plywood, suitable OSB or other resistant to water. 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 reinforcing lath (such as Keedelath HC or galvanized metal lath) when installing L3 at less the 3/8" 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 (FloorPrep.com) for applications that may 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 L3. Carefully read Primer data sheet to ENSURE Primer is utilized diluted (porous substrates) or undiluted (non-porous substrates) per given substrate.

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

## **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.

Prime wood subfloors with two applications of P360 NEAT, and mechanically fasten reinforcing lath to wood subfloor prior to application of the 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.

# Mixing

Water: 4.5 - 5 US Qts (4.25 - 4.73 L) per 50 lbs (22.7 kg)

Mix Time: 2 minutes with minimum 650 rpm drill or through approved mixer/pump.

L3's variable water ratio permits field adjustment to optimize flow for site conditions. Always stay within the recommended water range. 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, immediately pour onto the substrate to maximize material flow and placement time.

# **Pumping**

Platform L3 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 L3, but do provide for adequate ventilation and circulation of air. 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).

L3 is self drying, do not wet cure or use curing or sealing compounds. To facilitate drying, ensure rooms where L3 is installed have air circulation. Do not introduce heavy airflow to the surface of L3 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 in gypsum scale with a reading of 5% or lower, or a GE Protimeter Aquant in RF (Radio Frequency) mode with a reading of 180 or lower, indicates suitable dryness for virtually 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 - 1/2"	24 hours
1/2 - 1"	48 hours
>1"	48 hours plus 36 hours for each additional 1/2'

Internal testing of the latest generation of high performance underlayments including L3 indicates bond of cementitious adhesives like thinset and patch is significantly enhanced with the use of a primer. When utilizing cementitious patch or setting materials (thinset) enhanced bond can be realized by priming dried L3 with P360 primer diluted at 3:1 (water:primer). For enhanced bond and resistance to the movement of moisture and alkalinity prime the L3 with P360 diluted 1:1.

