# HYBRID SELF-LEVELING UNDERLAYMENT



# DIVISION

Division 3: Cast Underlayment 03-54-00

# **PACKAGING**

SKIMFLOW® LP

 50 lb (22.5 kg) double wall bag

# SUITABLE SUBSTRATES

All substrates must be clean, well bonded, sound and stable)

- Concrete and 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-compressible and non-soluble adhesive residue

# **LEED**

SKIMFLOW® LP may contribute to LEED certification of projects as follows:

Indoor Environmental Quality EQ 4.2 Low Emitting Materials Zero VOC

Building Reuse MR 1.1, MR 1.2 Provides new, pristine subfloor
Materials & Resources
MR 5.2, 4.1, MR 4.2
MR 5.1, MR 5.2
Regional Manufactured
Cleveland, OH
Regional Materials >50%

SKIMFLOW® LP with hybrid gypsum hydraulic cement technology is an innovative self leveling underlayment designed to facilitate ramping (1/4" in 12") or very flat floors. SKIMFLOW® LP is designed to address out of level or old damaged floors in residential, commercial, institutional and renovation environments. SKIMFLOW® LP dries to a smooth hard surface that facilitates rapid application of flooring goods in as little as 16 hours. SKIMFLOW® LPs exceptional volume stability and bonding characteristics facilitate application in light foot and of the substrate. Suitable for application over clean, sound substrates including concrete, gypsum, wood, corrugated steel deck LP may also be used over well bonded adhesives. LP is optimized for installation from 1/4" to 3" NEAT in a single lift, in climate controlled interior environments. SKIMFLOW® LP offers compressive strengths exceeding 4100 psi (28 days) and is compatible with some sound attenuation systems.

# **Features**

- Typically requires no mechanical preparation of concrete substrates for pedestrian traffic and light commercial applications.\*
- Optimized for installation from 1/4" to 3" 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 strength development.
- 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
- 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**

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 Non-Breathable *for greater depths	16 hrs <1" depth 24 hrs first 1/2"* see section "Drying Time"
Temperature for application (material & ambient)	Adjust temperature 50°F to 90°F of material by use warm or cold water for mixing	
Density	120-130 lbs/cu ft.	
Flammability	Flame Spread 0, Fuel Contribution 0, Smoke Development 0	
Yield	50 lbs 0.44 cu f	t (low water) - 0.46 cu ft (high water)
Coverage	Approx. 19 - 22 sq ft @ 1/4"	
Water per 50lb unit	3.75 - 4.75 US qts per 50 lbs I 3.5 - 4.5 I per 22,7 kg	
Packaging	50 lbs (22,7 kg)	
Shelf life	12 months when unopened & 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 50-90°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.
- · Do not use where hydrostatic pressure is present or moisture emissions exceeds level permitted for an installed floor covering SKIMFLOW® LP Underlayment can tolerate any amount of moisture from a concrete slab so long as all of the moisture from the slab will escape past the floor covering. If the floor covering's moisture permeability does not meet or exceed the moisture content of the slab, Dependable 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.

#### 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.

# PREPARATION AND APPLICATION

# FOR PROFESSIONAL USE ONLY

Reference the floor covering and adhesive manufacturers documentation to verify suitability of SKIMFLOW® LP as a subfloor for the flooring system (any adhesive used for concrete is generally suitable for LP). Follow the directions of the flooring and adhesive manufacturer to determine the maximum allowable moisture content (RH) or transmission of the substrate. If the moisture content (ASTM F-2170) or moisture vapor transmission rate (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 SKIMFLOW® LP.

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 34" of material above the hydronic system. SKIMFLOW® LP is compatible with and accepts the direct application of, urethane, moisture cure and other typical floor covering adhesives.

SKIMFLOW® LP can be applied in one lift to a maximum depth of 3" NEAT monolithically. It is recommended clean, washed and SSD (saturate surface dry) 1/4 - 3/8" pea gravel is utilized in areas deeper than 3". Applications deeper than 3" must be extended with aggregate. Extend SKIMFLOW® LP up 50% (by weight - 25 lbs pea gravel per 50 lbs L2). Ensure pea gravel is thoroughly mixed in (encapsulated) by the SKIMFLOW® LP.

#### **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 SKIMFLOW® LP. 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 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. SKIMFLOW® LP 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. FloorPrep.com recommends use of reinforcing lath when installing SKIMFLOW® LP over wood subfloors, contact technical support for details.

# **Priming**

Prime properly prepared substrate with PRIMER P360 prior to the application of SKIMFLOW<sup>®</sup> LP, 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.

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

When applying SKIMFLOW $^{\circ}$  LP on wood substrates double prime with Primer P360 NEAT and utilize reinforcing lath stapled to the wood floor after priming.

#### 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.

# 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. Technical Assistance: Visit our website: floorprep. com or call 1-800-227-3434.

# PREPARATION AND APPLICATION Continued

#### Mixing

Water: 3.75 - 4.75 US Qts (3.5 - 4.5 L) per 50 lbs (22.7 kg) Mix Time: 2 minutes with minimum 650 rpm drill or through pump.

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 mix. 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**

SKIMFLOW® LP 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 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 SKIMFLOW® LP, but do provide for adequate ventilation and circulation of air. SKIMFLOW® LP generally hardens to accept light foot traffic 3 - 4 hours after placement. Avoid construction traffic for a minimum of 16 - 24 hours (temperature dependent).

LP is self drying, do not wet cure or use curing or sealing compounds. To facilitate drying, ensure rooms where LP is installed have air circulation. Do not introduce heavy airflow to the surface of LP 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 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 - 1/2" 24 hours

1/2 - 1" 48 hours

>1" 48 hours plus 36 hours for each additional 1/2'

When LP may be subject to water exposure, prime with an acrylic primer, such as Primer A™). Follow primer instructions.



