



# UNIFLOW

SELF-LEVELING UNDERLAYMENT

CONCRETE 3: FLOOR HARDENERS / TOPPINGS / LEVELERS

## PRODUCT DESCRIPTION

Uniflow is a modified cement based self-leveling underlayment, offering the user the additional benefits of ease of placement and low labor demands. Uniflow is composed of a proprietary blend of fine silicas, high-grade cementitious binders and other quality ingredients. It is the most effort-free product of its type on the market today.

## GENERAL USES

Uniflow is designed for interior use on both new construction and restoration projects. Its ease of placement enables the crew to complete larger areas of flooring in a short period of time, with full confidence in the finished product.

Uniflow can be used on uneven and rough concrete floors, including those abused by rain during setting, freeze/thaw, and improper or badly timed finishing. It can be used in rehabilitation projects over old concrete, terrazzo and tile flooring to provide a smooth and attractive under flooring for subsequent application of carpeting, parquet, tile and the like.

## FEATURES

- Uniflow, furnished in dry form, requires very little mixing time and only potable water to produce a liquid underlayment that provides a flow time of 20 minutes at 70°F
- Can be featheredged without fear of chipping or spalling
- Automatically levels itself, requiring no toweling
- Can be pumped
- Is virtually volume stable
- Produces a smooth blemish-free surface, requiring no grinding or sanding
- Is compatible with subsequent adhesives for carpet, tile and the like
- Resists water spills
- Achieves - 5250 psi compressive strength in 28 days

## STANDARDS

VOC compliant

## INSTRUCTIONS FOR USE

### *Surface Preparation*

Roughen surface are to receive UniFlow. Clean concrete surface of all dirt and debris to expose sound concrete surface.

Carefully plan the work sequence. Each area must be started and completed as a single placement.

### *Priming*

**After sub-floor is prepared and cleaned it must be primed with Uniprimer prior to placing Uniflow.** Refer to Uniprimer technical data sheet. Apply with brush or broom at 150-250 square feet per gallon. Do not use paint rollers, mops or spray equipment. Coverage will vary depending on concrete surface texture. Allow Uniprimer to dry completely to touch before Uniflow placement. Uniprimer will dry to a thin visible film. Do not wait longer than 24 hours. Do not allow to puddle. Very porous concrete may require two applications. Protect all surfaces from traffic and dust. It is recommended that in all cases a primer adhesion test be performed prior to placement of Uniflow. Take a utility knife; scrape a tic-tac-toe diagram into the primer. If the primer can be lifted with the knife blade, it is not a suitable application. If the primer remains attached and only scratches the primer, the surface is suitable for application. Special surfaces require specific priming instructions. Refer to manufacturer for complete technical support on proper preparation and priming steps prior to Uniflow placement.

### *Mixing*

Use 4.5 to 5 quarts of clean potable water per 45 lb bag of Uniflow. Do not use more than 5 quarts of water.

Use a paddle or reel mortar mixer. To insure a continuous flow of material, it is good practice to utilize two mortar mixers, preferably gasoline powered.

Prior to the first batch of underlayment, wash out the mixer and determine the number of bags to be placed at one time. Mix only the amount of underlayment that can be placed within 20 minutes.



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TYPICAL PERFORMANCE DATA 72°F OF 50% RH 10.4 lb (4.5 QUARTS) OF WATER PER 45 lb BAG OF UNIFLOW				
Working Time 15 - 25 min.	HARDENED PROPERTIES OF UNIFLOW			
	Properties	1 day PSI	7 days PSI	28 days PSI
Set Time ASTM C260 Initial - 55 minutes Final - 75 minutes Packaging - 45 lb bag	Compressive Strength	1750 PSI	3500 PSI	5250 PSI
	ASTM C1042 Bond Strength With Uniprimer			1000 PSI
	Coverage per 45 lb bag - 24.4 sq. ft/ 1/4 in.			

Place into the mixer approximately 2/3 of the total water required for maximum consistency, and then slowly add the underlayment into the operating mixer. Take care not to overload the mixer to the point of stalling. Mix to a doughy state, approximately 2 minutes.

After all lumps have disappeared, add the remaining water to achieve desired consistency (but not exceeding the maximum water allowed). The mixing is to continue until uniform consistency is achieved. The approximate mixing time with most equipment will be from 3 to 4 minutes.

**Application**

Apply at surface temperatures between 40°F and 90°F.

Pour Uniflow in place. Placement should be continuous until completed. Do not overwork Uniflow, as this may cause segregation, bleeding and breakdown of initial set. If vibrating machines or equipment are being used nearby, shut them down until underlayment takes final set. Under no circumstances should Uniflow be retempered.

**Yield**

Approximately 24.4 sq.ft./45 lb bag at 1/4" when properly mixed with water. Yield will vary slightly depending on the amount of water, mixing equipment, temperature and other field conditions.

**PACKAGING**

- 45 lb (22.7 kg) bag

**LIMITATIONS/WARNINGS**

Do not apply Uniflow to floors that have been previously sealed or treated with curing and parting compounds or other coatings, unless these products have been chemically and/or mechanically removed. Do not apply to uncured concrete.

Uniflow produces an alkali solution and it is advisable that rubber boots be worn and that the eyes and skin protected from splashes during use. In the event of contamination, wash thoroughly with cold water. Contains calcium sulfate (gypsum), silica sand, cement, fly ash. If eyes are affected, they should be irrigated with water and medical attention sought.

Consult material safety data sheet prior to use.

**TECHNICAL SERVICES**

Universal Building Products Inc. - Chemical Division Technical Service Department provides complete product and technical support.

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