



PRODUCT NAME

IMPACT[®]

MANUFACTURER

Ultra Durable Technologies

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PRODUCT DESCRIPTION

IMPACT is a unique, water-based, ultra-clear, aliphatic urethane sealer formulated to enhance, beautify and protect concrete & terrazzo floors from chemical attack and abrasion.

One thin coat of IMPACT is more durable and chemical resistant than traditional water-based urethanes, water-based acrylics, and solvent-base acrylic sealers.

WHY CHOOSE IMPACT?

With almost no odor, IMPACT may be applied directly to smooth concrete & terrazzo as a durable chemical-resistant alternative to polishing.

Apply IMPACT over concrete dyes and acid stains as well as epoxies & decorative systems such as metallics.

IMPACT **Clean & Seal** and **Grind and Seal** systems are simple and reduce preparation and maintenance steps. One coat of IMPACT will provide extreme durability and protection for years without buffing and frequent recoating.

PROVEN INDUSTRIES

Institutional: healthcare facilities, schools, universities, churches, museums

Government: city, county, state and federal buildings, historical and convention centers

Commercial: stadiums, theaters, malls, restaurants, hospitality, cafeterias

Transit: airports, train, subway & rental car depots

UNIQUE ADVANTAGES

- Bonds direct to smooth troweled and polished concrete
- No buffing, burnishing, or diamond pad maintenance
- Super-wetting that enhances and brightens colors
- Non-yellowing and UV stable aliphatic urethane
- Incredible resistance to abrasion, dulling and scuffing
- Excellent chemical resistance (includes acid resistance)
- Increased slip-resistance available for ramps and stairs
- Water-based polyurethane-polyurea technology
- 50%+ solids compared to traditional 10-25%
- Gloss or matte sheens (mix together 1:1 for semi-gloss).

PACKAGING 4 component urethane (Parts A, A-1, B, C)

Standard Kit: Parts A, A-1, B and C = Approx. 1/2 gal.

Contractor Kit: Parts A, A-1, B and C = Approx. 1 gal.

Bulk Kit: Parts A, A-1, B and C = Approx. 3 gal.

COVERAGE RATES

Standard Kit – T-bar/Back-roll method: 250-400 SF

Standard Kit – Rolling method: 150-250 SF

Contractor Kit – T-bar/Back-roll method: 500-800 SF

Contractor Kit – Rolling method: 300-500 SF

Bulk Kit – T-bar/Back-roll method: 1750-2800 SF

Bulk Kit – Rolling method: 1050-1750 SF

SHELF LIFE

6 months unopened when stored at room-temperature (59-77°F, 15-25°C)

TECHNICAL DATA

Solids content	52%	ASTM D2369
Solids content (33% "primer reduction")	39%	ASTM D2369
Color (when mixed)	Milky White	
VOC Content	95 g/l	ASTM D7768-12
<i>VOC compliant in all U.S. states except Los Angeles SCAQMD counties</i>		
Gloss readings - Gloss	88°-92°	60° angle
Gloss/Matte (1:1 mixture)	55°-59°	60° angle
Matte	8°-12°	60° angle
Mixed viscosity	23 cps	ASTM 2196
Pot life, Gloss 4hr / 8hr	45 min / 90 min.	
Pot life, Matte 4hr / 8hr	30 min / 60 min.	
Dry times (77 deg / 50% RH)		
- Dry to touch - 4hr / 8hr	3hrs / 5 hrs	
- Light foot traffic - 4hr / 8hr	4 hrs / 8 hrs	
- Recoat window - 4hr / 8hr	3-5 hrs / 6-10 hrs	
- Full cure/chemical resistance	7 days	
Hardness	4H	Pencil test



TECHNICAL DATA (CONTINUED)

Taber Abrasion, CS-17, 1,000 grams, 1,000 cycles	35 mg loss	ASTM D4060
Adhesion (pull test)	260 psi	ASTM D4541 (concrete failure)
Elasticity (Mandrel Bend)	1/8" pass	ASTM D522
Tensile Strength	2430 psi	ASTM D2370
Elongation	55%	ASTM D2370
Water Vapor Transmission	2.53 perms	ASTM D1653
Wet DCOF Gloss	0.35	ANSI B101.3
Wet DCOF w/Fine Ultra Grip	0.55	ANSI B101.3
Wet DCOF w/Med Ultra Grip	0.54	ANSI B101.3
Wet DCOF w/Coarse Ultra Grip	0.7	ANSI B101.3

CHEMICAL RESISTANCE

Bleach	P	Vinegar	P
Coffee	P	Ketchup	P
Coca-Cola	P	Mustard	P *
Liquid Hand Soap	P	Pickle Juice	P
Red Dye #40	P *	Used Motor Oil	P
Betadine Solution	P *	Bowl Cleaner	P

* mild stain. Removable with rubbing alcohol

ENVIRONMENTAL TESTING

Moisture Content: Concrete must be cured prior to coating (poured and aged at a material temp of at least 75°F for at least 30 days), structurally sound, and free of contaminants including but not limited to waxes, loose paint, dust, dirt, grime, oils, release agents, curing compounds, and any surface laitance (a layer of weak and nondurable material). All interior concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride testing (ASTM F1869) or plastic sheet testing (ASTM D4263) and relative humidity probe testing (ASTM F2170) to determine if excessive levels of moisture vapor emissions are present before applying any coatings. Slabs on grade shall have a moisture vapor emission rate of less than 8 pounds / 1,000 SF / 24 hours when measured by calcium chloride test.

Air Temperature: IMPACT SHALL NOT be applied when the air temperature is above 90°F or below 40°F (4°-32°C).

Humidity: IMPACT dry times are lengthened (slower) in high-humidity and shortened (faster) in low-humidity environments. IMPACT SHALL NOT be applied when the humidity is above 70%. Adjustments to the temperature or relative humidity may need to be made prior to beginning the coating process. For best results, use fans and/or dehumidifiers when applying coatings in moist or humid environments. Although a building may be climate controlled, check the temperature and humidity and take appropriate action. Beware that some facilities have automatic thermostats that are turned down or even turned off in the

evening hours. This can dramatically affect the temperature and humidity in the building.

Floor Temperature and Dew Point: IMPACT SHALL NOT be applied when the substrate (floor) temperature is less than 5° above the dew point (See DEW POINT CALCULATION CHART). Monitoring the substrate temperature, indoor temperature, and RH, and utilizing fans and/or dehumidifiers as needed will help correct or prevent existing or possible dew point conditions until the installation is complete. All substrates must be prepared by trained or experienced contractors or maintenance personnel. UDT and its representatives or sales agents will not be responsible for coating failures due to improper preparation processes, undetected moisture vapor emissions, or other unacceptable environmental conditions.

FLOOR PREPARATION

It is extremely important to remove all existing acrylic finishes, urethane coatings, guard products, silicate surface hardeners, curing membranes, paint, oil, and dirt. If you suspect the surface has been treated or sealed, prepare substrate for removal. Failure to do so may result in diminished durability, loss of adhesion, varied gloss and inconsistent color enhancement. Substrate must be structurally sound and dry. Contamination such as oils, chemicals, excessive salts or alkali silica reaction (ASR) may also contribute to floor failure. Upon completion of any of the following procedures, clean the floor with microfiber that has been dampened with hot water prior to coating.

Remove acrylic finishes (waxes): Chemically strip or mechanically grind the floor to remove all acrylic floor finish. If chemically stripping, rinse with water until it is no longer soapy, sudsy, or cloudy. Citric or Phosphoric acid may be used to help neutralize the floor. Wet vacuum slurry and microfiber mop to remove any remaining debris.

Remove existing guard products from polished floors: Mop the floor with a liberal amount of plain water (neutral cleaners may be used if floor is soiled). While wet, scrub the floor with a slow-speed scrubber and 60-150 grit screens placed under a clean pad. Wet vacuum slurry and microfiber mop to remove any remaining debris.

When recoating an existing coat of IMPACT: Mop floor with water and a small amount of neutral cleaner. While floor is wet, scrub the floor slowly with a slow-speed scrubber and 60-100 grit screens under a clean pad at a rate of 1,000 SF per hour. Flip the screen every 200 SF and discard after 400 SF. After screening, it is recommended to scrub floor with a UDT supplied Very-Fine Maroon Conditioning Pad under a separate clean pad at a rate of 1,000 SF per hour. Flip the maroon pad every 100 SF and discard after 200 SF.

DESIRED APPEARANCE

Choose the desired appearance (level 1-4), and then match the appropriate IMPACT product and application methods below:

Level 1 (flat) – Use IMPACT Matte

Application = Rolling method

A level 1 ground polish usually can be obtained by stopping below the 100-grit resin bond. When you look directly down at the



floor, it will appear somewhat hazy with little if any clarity or reflection.

Note – The rolling method must be used when applying IMPACT matte direct-to concrete.

Level 2 (satin) – Use IMPACT Gloss with Fine Ultra Grip or UDT Aggregate #240

Application = T-bar/Back-roll method

A level 2 honed polish is typically obtained by stopping at the 400-grit resin bond, producing a low-sheen finish. When you look directly down at the finished floor and at a distance of roughly 100 feet, you can start to see a slight overhead reflection. This grit level produces a low-luster matte finish.

Note – Using Fine Ultra Grip or Aggregate #240 will add a small amount of grit / texture to the floor.

Level 3 (semi-polished) – Use IMPACT Gloss with Medium or Coarse Ultra Grip or UDT Aggregate #120

Application = T-bar/Back-roll method or Rolling method

A level 3 polish is typically achieved by going up to an 800-grit or higher diamond abrasive. The surface will have a much higher sheen than that of level 2 finish, and you'll start to see good light reflectivity. At a distance of 30 to 50 feet, the floor will clearly reflect side and overhead lighting.

Note – Using Medium or Coarse Ultra Grip or Aggregate #120 will add a significant amount of grit / texture to the floor.

Level 4 (highly polished) - Use IMPACT Gloss

Application = Rolling method

This level of polish produces a high degree of shine, so that when standing directly over the surface, you can see your reflection with total clarity. Also, the floor appears to be wet when viewed from different vantage points. A level 4 polish is typically obtained by going up to a 3,000-grit resin-bond diamond or by burnishing the floor with a high-speed burnisher outfitted with specialty buffing pads.

MIXING INSTRUCTIONS

Ensure USE BY DATE on Part A is current (not expired).

Ensure all components are between 59-77°F (15-25°C).

Mixing videos available at: <https://ultrad.com/videos-2/>

See IMPACT® Safety Data Sheet (SDS) for safety and handling at: <https://ultrad.com/safety-data-sheets/>

– Standard Kits

- 1) Shake Part A-1 (4hr. or 8hr.) and pour into Part A and stir.
- 2) While stirring, pour Part B into A/A-1 mixture. Scrape all sides and bottom well. Stir for 90 seconds.
- 3) Allow A/A-1/B mixture to dwell (sit) for one (1) minute.
- 4) Add Part C slowly while stirring for 30 seconds.
- 5) **OPTIONAL** – If using IMPACT for a PRIMER COAT, fill the empty Part C with water and stir into mixture (16 oz water).
- 6) **OPTIONAL** - add 1 scoop Aggregate Additive or one (1) bag Ultra Grip. Stir before every pour.

– Contractor Kits

- 1) Shake Part A-1 (4hr. or 8hr.) and pour into Part A and stir.
- 2) While stirring, pour Part B into A/A-1 mixture. Scrape all sides and bottom well. Stir for 90 seconds.
- 3) Allow A/A-1/B mixture to dwell (sit) for one (1) minute.
- 4) Add Part C slowly while stirring for 30 seconds.

5) **OPTIONAL** – If using IMPACT for a PRIMER COAT, fill the empty Part C with water and stir into mixture (32 oz water).

6) **OPTIONAL** - add 1 scoop Aggregate Additive or two (2) bags Ultra Grip. Stir after every pour.

– Bulk Kits

- 1) Shake Part A-1 (4hr. or 8hr.) and pour into Part A and stir.
- 2) Pour Part A/A-1 into a separate, clean 5-gallon pail.
- 3) While stirring, pour Part B into A/A-1 mixture. Scrape all sides and bottom well. Stir for 90 seconds.
- 4) Allow A/A-1/B mixture to dwell (sit) for one (1) minute.
- 5) Add Part C slowly while stirring for 30 seconds.
- 6) **OPTIONAL** – If using IMPACT for a PRIMER COAT, fill the empty Part C with water and stir into mixture (128 oz water).
- 7) **OPTIONAL** - add 1 scoop Aggregate Additive or seven (7) bags Ultra Grip. Stir before every pour.

POT LIFE

Always use mixed product within pot life.

8 Hour GLOSS: 90 minutes

4 Hour GLOSS: 45 minutes

8 Hour MATTE: 60 minutes

4 Hour MATTE: 30 minutes

APPLICATION INSTRUCTIONS

Primer coat for concrete (optional). Inspect the floor to determine if a primer coat should be used. Apply a primer coat of IMPACT if the concrete has been grinded with metal bond diamonds only (CSP 2 – CSP 3) or is very pitted or porous. The primer coat will seal the floor to minimize roller marks and increase working time. To mix the IMPACT primer mixture, see mixing instructions for PRIMER COAT. Apply the primer coat using either the T-bar/Back-roll method or Rolling method below. The coverage rate of the IMPACT Primer is approximately double that of regular IMPACT GLOSS. Make sure to recoat the primer with IMPACT within the stated “recoat window” (within the following time after the primer was first mixed).

Recoat window of primer coat:

4hr A-1 = 3-5 hours, 8hr A-1 = 6-10 hours, No A-1 = 12-16 hours
If the topcoat of IMPACT is not applied within the recoat window, scrub the primer coat with screens and maroon pads prior to topcoating with IMPACT (see Recoating IMPACT). **Failure to follow proper preparation instructions after priming may result in delamination of the final topcoat from the primer coat.**

Rolling Application Method

Fit 18” and 6.5” edge rollers (3/8” nap) on frames. De-lint rollers with tape. Pour 1-2” of IMPACT into rolling pan(s). Load rollers by moving them slowly back and forth in the pan. Using the edge roller, roll IMPACT along the far wall and proceed to roll the edges of the side walls. DO NOT edge roll more than 3-6 feet ahead of the 18” roller or you may get visible roller marks. Using the 18” roller, roll IMPACT along the far wall using a “W” motion. Each roller full of IMPACT should coat approximately 10-15 SF. Do not roll more than 3 feet deep (front to back). Once an area is covered with IMPACT, “feather roll” that area by slowly lifting the roller as you push it forward. “Feather rolling” slightly into previously rolled areas will minimize visible roller marks. Pour additional IMPACT into roller pans as needed. Remember not to fill it more than 1-2” deep. Mix additional IMPACT as needed, but



do not run out of IMPACT prior to starting the mixing process to avoid creating visible stop and start marks. When exiting the room, place wet rollers into a clean trash bag. The rollers may be used for up to 90 minutes on additional floors.

Rolling Tips

- Keep the rollers loaded to ensure a consistent thickness is applied, but do not allow IMPACT to pool/puddle.
- Optimal wet film thickness is 4-6 mils.
- Move rather quickly as the IMPACT will start to become tacky in 2-3 minutes. Rolling into the IMPACT that has begun to set up will leave roller marks that may be visible in the final finish.
- Apply IMPACT on hard-to-reach areas with a 2" paint brush.
- Keep a damp rag or paper towel handy to wipe IMPACT that may get on the wall base or permanent fixtures.

T-bar/Back-roll Application Method

Watch T-Bar/Back-roll method video www.ULTRADT.com/videos
Fit mohair back rollers (1/4" nap) and T-bar refills on frames. De-lint back rollers and refills with tape. Pour a line of IMPACT 3-4" wide across the entire area from wall to wall. This line should be poured approximately 8" away from the front wall. Drag or pull the T-bar at a slight angle across the room (like a snowplow). IMPACT should run off the edge of the T-bar closest to you. When approaching a side wall, rotate the T-bar 180 degrees. Continue to drag the T-bar at a slight angle back across the room with the wet edge of the T-bar now along the wall. This will apply sealer evenly next to the wall. After the first 2 passes with the T-bar, begin "back-rolling" along the wall using the 6.5" edge mohair back roller. Continue dragging the T-bar from wall to wall. Apply consistent downward pressure to the T-bar to leave an even amount of IMPACT on the floor. After 2-3 passes with the T-bar, the back roller should begin the back-roll process with the larger 12" or 18" mohair back-roller. Roll back and forth with adequate pressure to remove all lines and streaks left by the T-bar. Then, "feather roll" slightly into previously rolled areas by reducing pressure on the roller handle and lifting gently. Make sure the puddle for the T-bar never runs dry by pouring additional IMPACT on the floor. The T-bar refills and back rollers may be used for up to 90 minutes on additional floors.

T-bar/Back-roll Tips

- Keep the mohair back rollers as dry as possible and never roll into the puddle of IMPACT. If back rollers become saturated with IMPACT, squeeze out excess IMPACT on a dry part of the floor.
- Back-roll quickly as the IMPACT will start to become tacky in 1-2 minutes. Back-rolling into the IMPACT that has begun to set up will leave roller marks that may be visible in the final finish.
- Apply IMPACT on hard-to-reach areas with a 2" paint brush.
- Remove excess IMPACT from holes with a roller or paint brush.

MAINTENANCE INSTRUCTIONS

Daily Cleaning

Dust mop or sweep your floor daily to remove loose dirt. Wipe/clean up spills promptly. Damp microfiber mop as needed. Use a clean microfiber pad designed for damp mopping. Wet pad with water and wring it out thoroughly until it is just damp

(not dripping). Use a "figure eight" motion to clean floor. Be sure to rinse and wring pad frequently and change the water as it becomes cloudy/ dirty. Never clean floors with dirty water. Neutral pH cleaners may be used. Overuse of cleaning products, detergents, or dirty water may leave a residual film on the floor. Rinse with plain hot water to remove any surface film or haze.

Hot water will not harm the finish and will aid in removing the surface films or haze. A dry mop or micro-fiber wipe after the wet process will remove any film or residual water marks. For stains (specifically red or yellow from fruit punch, betadine, etc.), use rubbing alcohol on a soft cloth and wipe stain repeatedly until lightened or removed.

Caution: Floors can be slippery when wet. Use extreme caution when walking or working on a wet floor.

Auto / Machine Scrubbing

Wet auto scrubbing or machine scrubbing are suggested on an as-needed basis. Use UDT Microfiber Scrub Pads only. Launder microfiber pads periodically.

Never dry scrub or buff IMPACT coated floors!

Floor Protection

Address areas of wear and affix floor protectors to any furniture or fixture that may be prematurely damaging the floor. (See Expanded Technologies Catalog).

WARRANTY

Ultra Durable Technologies, Inc. products are warranted to be of uniform quality within manufacturing tolerances. Since no control is exercised over its use, no warranty, expressed or implied, is made to the effects of such use. Seller and manufacturer's obligations under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective.