



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 and 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 and terrazzo as a durable chemical-resistant alternative to polishing.

Apply IMPACT over concrete dyes and acid stains as well as epoxies and 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 directly 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%

PACKAGING

4-component urethane (Gloss or Matte Part A, 4-HR or 8-HR A1, B, C)

Standard Kit: Approx. 1/2 gallon

Contractor Kit: Approx. 1 gallon

Bulk Kit: Approx. 3 gallons

Mini Kit: Approx. 1 pint

COVERAGE RATES

Kit Size	Application Method	
	Rolling	T-Bar/Back-Roll
Standard	150-250 SF	250-400 SF
Contractor	300-500 SF	500-800 SF
Bulk	1050-1750 SF	2100-2800 SF
Mini	30-60 SF	50-80 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	50 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 (4-Hr / 8-Hr)	45 min / 90 min	
Pot life, Matte (4-Hr / 8-Hr)	30 min / 60 min	
Dry times (77°F, 50% RH)		
- Dry to touch (4-Hr / 8-Hr)	3 hours / 5 hours	
- Light foot traffic (4-Hr / 8-Hr)	4 hours / 8 hours	
- Full cure/chemical resistance	7 days	
Hardness	4 hours	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 or approved 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.



MIXING INSTRUCTIONS

Ensure USE BY DATE on Part A is current (not expired).
Ensure all components are between 59-77°F (15-25°C).
See IMPACT Safety Data Sheet (SDS) for safety and handling at: <https://ultrad.com/safety-data-sheets/>

– Standard, Contractor, & Mini Kits

- 1) Open Part A and stir thoroughly with stir stick or drill mixer.
- 2) Shake Part A1 (4-hr or 8-hr) and pour into Part A and mix for 30 seconds.
- 3) Set timer for 2 minutes and 30 seconds.
- 4) Open Part B and while stirring or drill mixing, pour Part B into A/A1 mixture. Product will turn white. Scrape all sides and bottom well if hand stirring. Stir/drill mix for 2.5 minutes.
- 5) **WHEN TIMER REACHES 2 MINUTES AND 30 SECONDS**, begin adding Part C in small doses, pouring gently into mixture while stirring/mixing for 2 more minutes. Scrape all sides and bottom of bucket to thoroughly mix all components if hand stirring.
- 6) **OPTIONAL** – for Standard kits, add 1 scoop UDT Aggregate additive or 1 bag Ultra Grip; for Contractor kits, add 2 scoops UDT Aggregate additive or 2 bags Ultra Grip; for Mini kits, add 1 teaspoon UDT Aggregate additive, 1 teaspoon Ultra Grip, or 1 bag I-TECH Countertop Additive. Stir frequently.

– Bulk Kits

- 1) Open Part A and stir thoroughly with stir stick or drill mixer.
- 2) Shake Part A1 (4-hr or 8-hr) and pour into Part A and mix for 30 seconds.
- 3) Pour A/A1 mixture into a separate, clean 5-gallon pail.
- 4) Set timer for 2 minutes and 30 seconds.
- 5) Open Part B and while stirring or drill mixing, pour into A/A1 mixture. Product will turn white. Scrape all sides and bottom well if hand stirring. Stir/drill mix for 2 minutes and 30 seconds.
- 6) **WHEN TIMER REACHES 2 MINUTES AND 30 SECONDS**, begin adding Part C in small doses, pouring gently into mixture while stirring/mixing for 2 more minutes. Scrape all sides and bottom of bucket to thoroughly mix all components if hand stirring.
- 7) **OPTIONAL** – add 7 scoops UDT Aggregate additive or 7 bags Ultra Grip. Stir frequently.

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

– Rolling Application Method

PREPARATION

STAGE THE AREA with protective walk-off matting at doorway. Tape off doorways or other areas that should not be coated.
ASSEMBLE ROLLERS. De-lint with tape.
PUT ON GLOVES AND GLASSES. Long sleeves are recommended. Refer to Safety Data Sheets (SDS) for additional information.
CONFIRM SQUARE FOOTAGE. Ensure the correct amount of IMPACT is prepared to mix (see page 1, "COVERAGE RATES").
MIX IMPACT according to instructions.

Do not mix more than can be applied within maximum pot life:
8 Hour GLOSS: 90 minutes 4 Hour GLOSS: 45 minutes
8 Hour MATTE: 60 minutes 4 Hour MATTE: 30 minutes
PLACE LINER INSIDE WIDE BOY BUCKET and pour IMPACT into liner.
LOAD 3/8" ROLLERS with IMPACT.

APPLICATION

USE EDGE ROLLER to roll IMPACT along the far wall and back 3-4 feet along each side wall.
USE 18" ROLLER and roll side-to-side (approximately 5 feet wide), then forward-and-back (approximately 3 feet deep) in a "W" motion to evenly spread IMPACT (approximately 15 square feet at a time). Make your way from one wall to the other, then stop and return to the first wall (go from wall A to B, and then A to B again, etc).
USE EDGE ROLLER again and roll 3-4 feet further along the wall just prior to rolling with 18" roller.
USE 18" ROLLER again and roll side-to-side, then forward-and-back in a "W" motion. Feather-roll into previous rolled areas by rolling just past previous roller lines and lifting slowly (like an airplane taking off).
CONTINUE applying IMPACT by working together with the edge roller and 18" roller. Replace rollers every 2 hours or if they become flattened.
USE PAINT BRUSH to apply IMPACT in hard-to-reach areas.
MIX ADDITIONAL IMPACT as needed. Mix more IMPACT before running out to avoid delays in the rolling process.

– T-bar/Back-roll Application Method

Do not use the T-bar/Back-roll method for direct-to-concrete applications!

PREPARATION: Affix shoe covers. Perform final cleaning with damp microfiber mop pad. Place protective walk-off matting at doorway. Tape trash bag to floor at planned exit to capture excess IMPACT upon completion. Tape off doorways or other areas that should not be coated. Assemble and de-lint T-Bar and back-rollers. Put on gloves and glasses; long sleeves are recommended; refer to Safety Data Sheets (SDS) for additional information. Ensure correct amount of IMPACT is available to mix for coverage required (see page 1, "COVERAGE RATES").
MIX IMPACT according to instructions.

APPLICATION

STIR IMPACT and pour line about 8" from back wall, about 3-4" wide, from one side wall to the other.
T-BAR TECHNICIAN: Wet T-Bar applicator in poured line of IMPACT. Drag or pull T-Bar at slight angle along poured line across room (like a snowplow). IMPACT should run off edge of T-Bar away from back wall. When approaching side walls, rotate T-Bar 90° and pull along side wall (away from back wall) about 18", then rotate T-Bar 180° so wet end is now toward side wall. Continue to drag T-Bar at slight angle along poured line and return to opposite side wall. Avoid creating a puddle of IMPACT near any wall.
BACK-ROLLER TECHNICIAN: After T-Bar Technician has made first 2 passes, back-roll over IMPACT along wall using 6.5" Edge Mohair Back-Roller.
T-BAR TECHNICIAN: Continue dragging T-Bar from wall to wall. Apply consistent downward pressure to leave an even amount of



IMPACT on floor. Ensure Back-Roller Technician can reach all areas (do not run T-Bar more than 2 or 3 passes ahead).

BACK-ROLLER TECHNICIAN: Begin back-rolling with 12" or 18" Mohair Back-Roller. Push back and forth with moderate pressure to remove all lines and streaks left by T-Bar. Feather-roll into previous rolled areas by rolling just past previous roller lines and lifting slowly (like an airplane taking off).

STIR AND POUR MORE IMPACT as needed to ensure puddle for T-Bar never runs dry. Maintain 3- to 4"-wide line. Stir before every pour.

MIX ADDITIONAL IMPACT as needed before running out to avoid leaving visible stop/start marks.

APPROACHING EXITS AND FINISHING CORNERS may require making an "L" shape along side wall. Turn T-Bar 90 degrees to original line of IMPACT and pull bar along side wall toward exit wall. Make 2-3 passes with T-Bar along side wall, then resume 2-3 passes on original line. Alternate between lines until exit.

COAT AND BACK-ROLL BEHIND DOOR(S) before coating area in front of door.

TIPS:

Keep back-rollers as dry as possible and never roll into the puddle of IMPACT. If back-rollers become saturated, squeeze excess on dry part of floor. Do not slide back-roller sideways. Replace rollers every 2 hours or if they become flattened. Back-Roller Technician should step back to allow T-Bar Technician to pass. Apply IMPACT on hard-to-reach areas with 2" paint brush. Keep rag or paper towel handy to wipe IMPACT from places it should not be. USE T-BAR to pull excess IMPACT past exit into trash bag taped to floor.

MAINTENANCE INSTRUCTIONS

Ultra Durable Technologies recommends the following cleaning procedures for floors that have been coated with IMPACT:

SWEEP OR DUST MOP

Sweep and/or dust mop regularly to remove sand, dirt, and debris. Sweeping or dust mopping frequently will help minimize wear as well as prevent the dulling of IMPACT's glossy appearance.

MICROFIBER MOP

Microfiber mopping minimizes chemical and water consumption, making it a desirable method for daily floor cleaning. Wring out microfiber mop pads as much as possible to minimize the potential for residual water marks or cloudiness. Occasionally follow up with a dry microfiber mop to remove any surface haze from detergents or soil.

TRADITIONAL STRING MOP

The standard "mop and bucket" cleaning method may be used for spot cleaning spills. This method may also be used for daily cleaning of large areas if the water is changed frequently and mop heads are laundered frequently. Occasionally follow up with a dry mop to remove any surface haze from detergents or soil.

MACHINE FLOOR SCRUBBING PROCEDURES

Machine scrubbing is an approved cleaning method for large areas that have been coated with IMPACT. Machine scrubbing should be completed on an "as-needed" basis. Excessive

machine scrubbing can damage and shorten the life of any floor finish.

Walk-Behind or Riding Auto-Scrubber:

- Remove entrance matting and any furniture.
 - Sweep or dust mop entire floor to remove loose dirt and debris prior to auto-scrubbing.
 - Fill auto scrubber with warm water or a chemical-free cleaning product.
 - Assemble floor-scrubbing machine with a UDT Microfiber Scrub Pad.
 - Set head pressure to medium/light.
 - Turn on the water switch and scrub floor according to machine manufacturer's directions.
 - Allow floor to dry and return furniture and matting.
- Slow-Speed 175-RPM Roto:**
- Remove entrance matting and any furniture.
 - Sweep or dust mop entire floor to remove loose dirt and debris prior to scrubbing.
 - Fill roto tank with warm or hot water or a chemical-free cleaning product.
 - If no water tank available, generously mop floor with warm or hot water or a chemical-free cleaning product.
 - Assemble floor-scrubbing machine with a UDT Microfiber Scrub Pad.
 - Scrub the wet floor to lift soil into suspension.
 - Use a squeegee vacuum or a clean traditional string mop to remove soiled water.
 - Allow floor to dry and return furniture and matting.

WARRANTY

Ultra Durable Technologies, Inc. products are warranted to be of uniform quality within manufacturing tolerances. Since no control is exercised over product 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.