

IMPACT SCREEN & SEAL STANDARD OPERATING PROCEDURE (SOP)

This SOP provides the step-by-step process of mixing and applying IMPACT water-based urethane to existing smooth or polished concrete where a grinding preparation process is neither suitable or desired. All concrete surfaces shall be scrubbed clean and all existing sealers shall be stripped / removed prior to applying IMPACT. A thin film of existing polish guard may be removed with water and screen sanding disks (60-80 grit).

IMPACT may be applied using the T-bar/Back-roll or Rolling method. The T-bar/Back-roll method yields 2-3 wet mils (1-2 dry) and the rolling method yields 3-5 wet mils (2-3 dry). The rolling method is not recommended for highly polished concrete.

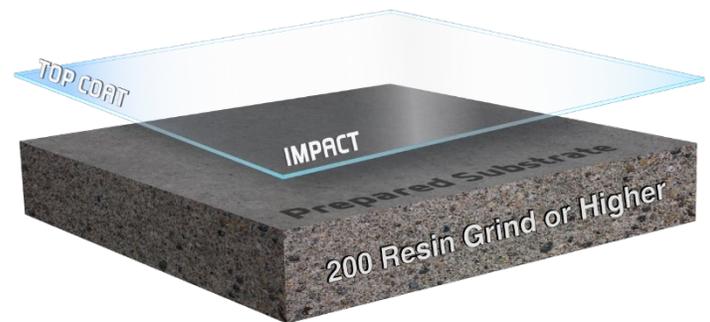
This IMPACT **SCREEN & SEAL** SOP is recommended for:

- existing polished concrete
- smooth, hard-troweled concrete

See IMPACT **GRIND & SEAL** SOP for rough or porous concrete ground at or below 100 grit resin.

System Required Tools

- a. IMPACT Water-based urethane Parts A, A1, B & C
 - b. IMPACT Bond Promoter (for Matte, direct-to-concrete)
 - c. Walk-off matting
 - d. Floor protectors
 - e. Rubber gloves
 - f. Safety glasses
 - g. Shoe covers (booties)
 - h. Chemical resistant tape
 - i. Microfiber mop & pads or tack duster
 - j. Threaded extension pole x 2
- k. 12" or 18" T-bar frame
 - l. 12" or 18" T-bar refills
 - m. 6.5" x 1/4" nap mohair back-rollers *
 - n. 12" or 18" x 1/4" nap mohair back-rollers *
 - o. 6.5" edge roller frame
 - p. 18" Wideboy roller frame
 - q. 2" paint brush
 - r. Paper towels/rags
 - s. Trash bags
 - t. Fans and/or dehumidifiers
 - u. "Wet floor" signs
 - v. Pump sprayer (for primer coat)
 - w. Psychrometer, Infrared Thermometer & Moisture Meter
 - x. Two technicians/laborers (minimum)



UDT IMPACT Screen and Seal Diagram

* For the Rolling method replace 1/4" nap mohair rollers with 3/8" nap shed resistant rollers

Environmental Testing

Moisture Content: 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. UDT and its representatives or sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

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).

Use a moisture meter to ensure that the concrete floor to be coated is sufficiently dry prior to starting the IMPACT application process. Moisture content must be within 1% of the original reading taken prior to preparing the floor.

Test the following environmental conditions in the area to be finished using a Psychrometer and Infrared Thermometer.

Air Temperature: IMPACT SHALL NOT be applied when the air temperature is above 90°F or below 40°F.

Relative Humidity (RH): IMPACT SHALL NOT be applied when the RH 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.

Final Preparation

STAGE AREA AND APPLY TAPE AT DOORWAYS AND EXITS. Stage the area with protective walk-off matting at the doorway. Tape off any doorways, exits or other areas that should not be coated. Tape a trash bag to the floor at your planned exit to pick up any excess IMPACT.

PREPARE T-BAR AND ROLLERS. De-lint back-rollers and T-bar refills with tape.

MICROFIBER MOP. Affix shoe covers (booties) to avoid getting contamination or debris on the floor. Perform a final cleaning of the floor with a damp or dry microfiber flat mop or tack duster to remove any fine debris.

PERSONAL PROTECTIVE EQUIPMENT. Put on rubber gloves and safety glasses prior to mixing and applying IMPACT. Wearing long sleeves is recommended. Refer to Safety Data Sheets (SDS) for additional information relating to safe handling practices.

T-Bar/Back-roll Method:

Coverage Rate: Contractor Kit: 500-800 SF, Standard Kit: 250-400 SF

1. CHECK USE BY DATE AND MIX IMPACT. Ensure that the “use by date” located on the lid on IMPACT Part A is current (not expired). Mix IMPACT. Mixing Instructions are found on the back of the Part A label.

2. BEGIN THE T-BAR PROCESS. As you begin, pour a line of IMPACT 3-4” wide across the entire area from wall to wall. This line should be poured approximately 8 inches away from the front wall. T-bar operator should now wet the T-bar applicator in the line of sealer. 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 90 degrees to the line of IMPACT along the side wall and pull the T-bar along the side wall approximately 18 inches. Then, rotate the T-bar 180 degrees so that the wet edge of the T-bar is now against the wall. 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. Avoid creating a puddle of IMPACT right next to the wall.

3. BEGIN BACK-ROLLING WITH 6.5” BACK-ROLLER. After the T-bar operator makes the first 2 passes with the T-bar, the back-roller should begin “back-rolling” over the IMPACT spread by the T-Bar along the wall using the 6.5” edge mohair back-roller.

4. CONTINUE WITH THE T-BAR. Continue gliding 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.

5. BEGIN BACK-ROLLING WITH 12” OR 18” BACK-ROLLER. 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. Push back and forth with adequate pressure to level and 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 slightly on a line or seam whenever possible.

6. POUR ADDITIONAL IMPACT. Make sure the puddle for the T-bar never runs dry by pouring additional IMPACT on the floor. Avoid misses or dry spots by pouring IMPACT as necessary to maintain a 3-4” wide line.

7. MIX ADDITIONAL IMPACT AS NEEDED. When approaching the coverage rate mark (in step 5), mix additional IMPACT. Do not run out of IMPACT prior to starting the mixing process to avoid creating visible stop and start marks. Allow at least 3 minutes for the mixing process.

8. APPROACHING EXITS AND FINISHING CORNERS. When approaching the room exit or a corner of the room, it may be necessary to make an “L” shape along the side wall. To do this, turn the T-bar 90 degrees to the original line of IMPACT and pull the bar up along the side wall up to the wall where you will exit. Make 2-3 passes with the T-bar along the side wall, and then resume making 2-3 passes on the original line. Proceed to alternate with the T-bar/back-roller between the original line and the new line at 90 degrees until you reach the planned exit.

9. EXITING—DOORWAYS. When exiting the room, pull all excess IMPACT into the trash bag that is taped to the floor. Finish back-rolling with mohair back-rollers. Place the wet T-bar and back-rollers in the trash bag, pull the tape, and remove the trash bag from 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.
- Resist overworking the IMPACT and do not slide the roller sideways.
- While back-rolling, the back-roller should step back and allow the T-bar operator to pass.
- 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.

Rolling Method:

Coverage Rate: Contractor Kit: 300-500 SF, Standard Kit: 150-250 SF

Rolling method not recommended for Matte finish or when using Fine Ultra Grip.

1. CHECK USE BY DATE AND MIX IMPACT. Ensure that the “use by date” located on the lid on IMPACT Part A is current (not expired). Mix IMPACT. Mixing Instructions are found on the back of the Part A label.

2. POUR IMPACT INTO ROLLING PAN. Pour a 1-2” deep puddle of IMPACT into rolling pan(s). Filling the rolling pan with too much product will increase the likelihood of IMPACT dripping off the edge of the roller frames. Load rollers by moving them slowly back and forth in the pan to load them with IMPACT.

3. BEGIN ROLLING EDGES. Using the edge roller, roll IMPACT along the far wall and proceed to roll the edges of the side walls. Make sure that the 18” roller is close behind. **DO NOT** edge roll more than 3-6 feet ahead of the 18” roller. Edge rolling too far ahead of the 18” roller will likely result in visible roller marks.

4. BEGIN ROLLING WITH LARGE ROLLER. Using the large roller (12” or 18”), roll IMPACT side to side and then forward and backward using a “W” motion. Each roller full of IMPACT should coat approximately 10-15 Sq. Ft. Do not roll more than 3 or 4 feet deep (front to back).

5. FEATHER ROLL. 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.

6. CONTINUE ROLLING. Continue rolling and feather rolling. Move quickly as the IMPACT will start to become tacky in 2-3 minutes. Rolling or feather rolling into areas where IMPACT that has begun to set up (after 2-3 minutes) will leave roller marks that may be visible in the final finish.

7. MIX ADDITIONAL EPIC. 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. Allow at least 3 minutes for the mixing process.

8. EXITING—DOORWAYS. Place the wet rollers in the trash bag & pull all tape from floors. The rollers may be used for up to 90 minutes on additional floors.

ROLLING TIPS:

- Keep 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.
- Resist overworking the IMPACT
- 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.

UPON COMPLETION:

TURN ON FANS AND/OR DEHUMIDIFIERS. Use fans and/or dehumidifiers to accelerate dry times or in humid environments that have little to no airflow. Keep doors open to assist with the airflow.

CLEAN UP. When the IMPACT application is complete (or when rollers have been used for 90 minutes), discard into the trash. The rollers are not reusable. Wash the roller frames with a damp rag or soap and water. Allow excess mixed IMPACT to dry in the bucket overnight before discarding according to local regulations.

ISOLATE THE AREA AND PLACE WET FLOOR SIGNS. Apply tape across all doorways and place “Wet Floor” signs indicating the time and date that the floor will be dry and ready for use.

AFFIX FLOOR PROTECTORS TO FURNITURE. Affix floor protectors to any furniture or fixture that may prematurely damage the floor. (See Expanded Technologies Catalog)