

# PIP Level-Cast Gray

## Self-Leveling Cement Resurfacer and Overlayment



7875 Bliss Parkway North Ridgeville, OH 44039  
440-327-0015 440-353-0549 - FAX

### DESCRIPTION

**PIP Level-Cast Gray** is a self-leveling, cement-based industrial floor resurfacer. PIP Level-cast Gray is a manufacturing grade product designed as a single-component system.

### USES

- Level existing damaged floors
- Restores a new slab look that is able to be polished or coated
- Resurface high moisture floors and maintains permeability

### ADVANTAGES

- Non-shrink with excellent bond and flexural strengths
- Self-leveling from featheredge to 1.5 inches neat.
- Up to 4 inches extended with Pea Gravel
- Accepts foot traffic in 1 hour
- Accepts Coatings in 3 hours
- Does not contain gypsum
- Reduces labor costs, may be pumped with standard equipment for ease in placement
- Compatible with PIP coatings

### PACKAGING AND COVERAGE RATES

PIP Level-cast Gray is packaged in 50 pound (22.7Kg) bags shipped 56 bags per pallet. PIP Level-Cast Primer or PIP 1000 epoxy for priming must be ordered separately.

Each PIP Level-cast Gray neat un-extended mix is 0.47 Cu. Ft and covers: approximately:

46 Sq. Ft. at 1/8"  
23 Sq. Ft. at 1/4"  
12.5 Sq. Ft. at 1/2"  
4.1 Sq. Ft. at 1.5"

Extended to 0.62 Cu. Ft.:

- with 25 lbs. PIP 3000 Coarse Sand (under 1.5" thickness)
- with 0.25-.375" Pea Gravel (above 1.5" thickness):

14.8 Sq. Ft. at 1/2" (extended with PIP 3000 Coarse)  
7.4 Sq. Ft. at 1" (extended with PIP 3000 Coarse)  
5.4 Sq. Ft. at 1.5" (extended with PIP 3000 Coarse)  
4.0 Sq. Ft. at 2.0" (extended with Pea Gravel)

### TECHNICAL DATA

<b>Working Time</b>	20 minutes
<b>Application Temperature</b>	50°F to 90°F (10°C to 32°C)
<b>Abrasion Resistance</b> (ASTM C-944)	1.0 grams
<b>Compressive Strength</b> (ASTM C 109)	
1 hour	1000 psi (7 MPa)
24 Hours	3500 psi (24 MPa)
7 days	5000 psi (34 MPa)
28 days	6000 psi (38 MPa)
<b>Flexural Strength</b> (ASTM C-348)	
28 days	1150 psi (8 MPa)

<b>Set Times</b>	(ASTM C-191/Vicat Method)
Final	35 minutes

**Water Req. Per Bag** 5 Qts. (4.25 L)

**Hard Dry Time** Light Traffic 1 hour

### DIRECTIONS

**SURFACE PREPARATION:** Remove loose concrete and all coatings or patching material. Fill large cracks, holes and voids with PIP Rapid Mortar 36-48 hours prior to placement. All joints must be maintained through the system.

### PRIMING:

**-Level-Cast Primer** -pre-mix before mixing 1:1 by volume with clean water and apply to prepared surface with a short-napped roller at a rate of 200 Sq. Ft. per gallon. Do not puddle. A second coat may be required over very porous concrete substrates. Allow the primer to become tack-free. Do not sand.

**-PIP 1000 Epoxy** – Mix according to TDS and apply to sufficiently wet the concrete without excessive puddling. Place the PIP Level-cast Gray within 1 hour of priming. Primer must be wet- **DO NOT LET PRIMER CURE.**

### HAND MIXING/HAND POUR:

**TOOLS:** Mixing barrel, gauged spreader, porcupine roller and 0.50 inch (1.3 cm) or larger, heavy-duty drill fitted with mixing propeller or Jiffy mix blade.

**MIXING:** Mix one 50-pound bag of PIP Level-Cast Gray with EXACTLY 5 quarts of water. DO NOT VARY WATER. Mix a maximum of two bags at a time by hand. Add the cement aggregate to the water at a steady rate while mixing with a drill and paddle. Mix for 2-3 minutes until lump-free.

**POUR:** Pour the PIP Level-Cast Gray onto the prepared area. Spread out using gauged rake or tool at the target depth. Use spiked roller to break air bubbles. Use a smoother for touch-ups. To avoid low spots between pours, pour into wet edge and spread. The maximum thickness to apply the PIP Level-Cast Gray (not extended) is 1.5 inches. Extend the PIP Level-cast Gray with 25 pounds of coarse sand for application of .5-1.5". Add the sand and mix until even. The addition of sand will reduce flow and leave a rough surface finish. Extend the PIP Level-Cast Gray with 25 pounds of Pea Gravel for applications above 1.5". Add the Pea Gravel and mix until even. The addition of Pea Gravel sand will reduce flow and leave a rough surface finish. **DO NOT** add additional water to increase flow.

**PUMP APPLICATION:** For pump methods and installation guidelines, contact Protective Industrial Polymers for specific detailed recommendations.

### CURE AND FINISH:

Contact Protective Industrial Polymers for coating and densifying options.

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### STORAGE:

Store in cool, dry, raised area on pallets. Shelf life is one year from the date of manufacture. Do not allow PIP Level-Cast Primer to freeze.

### LIMITATIONS:

- Avoid exposure to direct sunlight and air movement during and shortly after placement to avoid cracking and bubbles.
- Follow best concrete practice in very cold or very hot temperatures
- Do not place when air or surface temperature is below 45°F (6°C)
- PIP Level-cast Gray may be densified or coated within one to three days depending upon temperature and humidity
- PIP Level-Cast Gray may be densified or coated within one to three days depending upon temperature and humidity. Contact Protective Industrial Polymers for detailed limitations on coating types and recoat windows.
- Do not use PIP Level-Cast Gray in areas subject to freeze/thaw.

### CAUTIONS:

Causes irritation to eyes. Causes skin irritation, sensitization or chemical burns. Respiratory tract irritant. Use with adequate ventilation. Do not take internally. Keep out of reach of children.

Make certain that the most current versions of the product data sheet and MSDS are being used. Contact Protective Industrial Polymers customer service at 1-440-327-0015 to verify the most current version.

**TECHNICAL SUPPORT:** For application questions, please contact your salesman or PIP technical service at 440-327-0015.

**READ SDS (SAFETY DATA SHEET) FOR SAFETY AND PRECAUTIONS. USE PRODUCT AS DIRECTED FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.**

### WARRANTY AND CONDITIONS OF USAGE

**WARRANTY AND LIMITATION OF LIABILITY:** Protective Industrial Polymers Inc. ("PIP") warrants that its products shall conform to the manufacturer's written specifications and shall be free from defects for one (1) year from the date of purchase. PIP MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES AND DISCLAIMS THE SAME, INCLUDING, WITHOUT LIMITATION, FAILURE OF THE PRODUCT DUE TO ACTS OF GOD, FLOODING, EXTREME OR ABNORMAL TEMPERATURES, HUMIDITY AND MOSITURE, STRUCTURAL CONDITIONS, SITE PREPARATION AND CONDITIONS, ACCIDENTS, DAMAGE CAUSED BY INSTALLATION OF MACHINERY, EQUIPMENT OR FIXTURES WITHOUT ADEQUATE FLOOR PROTECTION OR WITHOUT ADEQUATE TIME FOR CURING, FAILURE TO COMPLY WITH CONDITIONS OF USAGE (SPECIFIED BELOW), VANDALISM, NEGLIGENT OR INTENTIONAL ACTS OF THIRD PARTIES OR OTHER CASUALTIES. If any PIP product fails to conform to this warranty, PIP shall either replace the product at no cost to Buyer or refund the cost of the product, in PIP's sole discretion. Replacement of any product or a refund of the cost of any product shall be the sole and exclusive remedy available to buyer, and buyer shall have no claim for incidental, special or consequential damages, including, without limitation, business interruption damages. Any warranty claim must be made within one (1) year from the date of delivery of products. PIP does not authorize anyone on its behalf to make any written or oral statements which in any way alter PIP's warranty or installation and storage information or instructions in its product literature or on its packaging labels. Any installation of PIP products which fails to conform to such installation information or instructions or the "Conditions of Usage" (specified below) shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of PIP's products for the Buyer's intended purposes.

**CONDITIONS OF USAGE:** Installation of all products purchased must be by professional installers periodically published by PIP or otherwise approved by PIP in writing. Modification to any of PIP's products voids the warranty. The installer shall maintain a written contemporaneous record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). PIP reserves the right of inspection of any installed product, installation and maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full. Moisture Vapor Transmission (MVT) and ASR (Alkali Silica Reaction) Disclaimer and Exclusion: Although rare, some floors at or below grade level are sometimes subjected to saturation by moisture from beneath the concrete floor slab. This moisture can travel through the concrete and collect between floor toppings creating the potential for delaminating from hydrostatic pressure and or ASR. Conditions contributing to this include heavy rainfall, broken pipes, excess hydration within fresh concrete, and other factors or defective and old concrete. These factors are difficult, if not impossible to predict. PIP recommends testing for MVT and/or the presence of ASR in the concrete substrate prior to applying any polymer floor topping. The recommended test method for MVT is ASTM F 2170-11. ASR can be predicted by a higher than normal pH within the concrete. If high pH should be detected, it is recommended a lab test for ASR. If and when delamination of the floor occurs because of a moisture condition that exists beneath or in the concrete slab beyond the capacity of the individual product installed or failure of the concrete due to ASR, this Limited Warranty does not extend to such delaminating or topping failure. This writing constitutes the sole and only agreement of warranty relating to PIP products.