



# IPATOP VO

A Repair Mortar for Vertical and Overhead Use

## IPATOP VO – Product Data Sheet

### Vertical and Overhead Concrete Repair Mortar

Description:

**IPATOP VO** is a two component cementitious polymer modified repair mortar. Controlled set and slump provide a superior **NON-SAG** repair mortar for vertical and overhead repairs.

Uses:

- ◆ A NON-SAG thick hang-up mortar on above and below grade concrete structures.
- ◆ For filling form tie holes, honeycombs, post tensioned pockets and other voids in concrete, brick or masonry.
- ◆ Finishing chipped columns, damaged parapet walls, chipped precast sections, capping pre-stressed hardware.
- ◆ Rehabilitation or restoring existing concrete structures.
- ◆ Structural repairs on parking ramps, bridges, tunnels and power plants.

Advantages:

- ◆ Superior physical properties to conventional portland cement mortars
- ◆ Excellent adhesion
- ◆ Hangs up in thick layers to speed repairs
- ◆ Coefficient of expansion similar to concrete
- ◆ Excellent resistance to deicing chemicals
- ◆ Eliminates use of convenience water
- ◆ Excellent workability results in labor savings
- ◆ Repaired areas will breathe
- ◆ Tradesman use conventional practices
- ◆ Excellent freeze-thaw resistance

TECHNICAL DATA

Physical Properties:

Compressive Strength (ASTM C 109)		Length Change (ASTM C 157)	
1 day	3300 psi	Air Cure	
3 day	3900 psi	1 day	-0.01 %
7 day	4300 psi	7 day	-0.02 %
28 day	5000 psi	28 day	-0.03 %
Slant Shear Bond (ASTM C 882)		Flexural Strength (ASTM C 78)	
7 day	1750 psi	28 day	950 psi
28 day	2200 psi		

Abrasion Resistance – Excellent  
 Impact Resistance – Excellent

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**Application Time:** Initial Set will occur within approximately 20 minutes after thorough mix of Components A and B. Temperatures in excess of 68°F (20°C) will accelerate set. Temperatures lower than 86°F (30°C) will retard set.

**Sculpture Time:** For an additional 20 to 30 minutes after initial set, the material can be formed (shaved) by the edge of a trowel. The finisher can shape (shave) the contour during this period of time.

### Surface Preparation:

Surface to be repaired must be cleaned of any film, scale, loose material, oils, grease and any other foreign material that will prohibit bond. Surface preparation may be accomplished by accepted water blast, mechanical or chemical methods. **IPATOP VO** may be feather edged for non-traffic bearing areas. Surface must be damp prior to application of **IPATOP VO**.

### Mixing Instructions:

Mixing may be done manually (small quantity) or mechanically (Jiffy® mixer or mortar mixer). Shake Component A thoroughly and add to mixing container. Mix as the Component B is added. Continue mixing until the mortar is uniform in consistency (about 3 minutes).  
CARE MUST BE TAKEN to insure correct mixing ratio, by weight, if an entire kit is not mixed at once.

### Application:

Surface must be dampened with water or **IPATOP VO** liquid component. When mortar is placed material should be worked thoroughly into the substrate to insure proper bond and to avoid honeycombing. After initial set is attained, **IPATOP VO** mortar may be sculptured or finished to desired shape. Wood, sponge or steel trowel may be used, depending upon desired finish. In cases of unconsolidated or extremely porous surfaces, **IPA's DURIPAL** may be used as a surface conditioner. Spray several light coats of **DURIPAL** onto surface avoiding applying more than the surface can absorb. Allow to dry, then place **IPATOP VO**. Component A **must not be permitted to dry** when used as a surface primer before mortar is placed.

### Curing:

Water mist or wet burlap will provide the best curing conditions. Best results will be obtained if **VO** is moist cured for a minimum of 3 days. **DO NOT USE SOLVENT BASED CURING COMPOUNDS ON IPATOP VO.**

### Clean-up:

Cleanup must be done immediately due to the high bonding characteristics of **IPATOP VO**. Clean equipment with water.

### Packaging:

Two component Kit: Component A — Liquid Polymer in 1 Gallon Plastic Jug (3.8 Liters)  
Component B — Powder blend of portland cement, admixtures and finely graded aggregates in 44.0 LB (20 kg) bag.  
Total Kit Weight is 52.5 lb. (23.8 kg)

### Limitations:

Do not install **IPATOP VO** unless substrate and air temperature are at least 40°F (4.4°C) and rising for the next 48 hours. Do not apply to a frozen surface. Component A is destroyed if frozen. **DO NOT USE SOLVENT BASED CURING COMPOUNDS.** Care must be taken to insure proper concrete practices are used in preparation, mixing, placing and curing.

### **CAUTION – FOR INDUSTRIAL USE ONLY:**

Freshly mixed cement, mortar, grout, or concrete may cause minor skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly with water. If any of the cementitious material get into the eyes, rinse immediately and repeatedly with water. If irritation persists, obtain medical assistance. Consult MSDS for additional safety information.

### **WARRANTY**

This product is warranted and guaranteed to be of good quality. Manufacturer, as its sole and exclusive liability hereunder, will replace material if proved defective. **THIS WARRANTY AND GUARANTEE ARE EXPRESSLY IN LIEU OF ALL OTHERS, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND MAY NOT BE EXTENDED BY REPRESENTATIVES OR ANY PERSONS, WRITTEN SALES INFORMATION, OR DRAWINGS IN ANY MANNER WHATSOEVER.** While the manufacturer recommends uses for the product based on tests believed reliable, no warranties, express or implied, or guarantee can be given as to particular methods of use or application, nor can performance be warranted, expressly or impliedly, or guaranteed under special conditions. Distributors, salespersons or company representatives are NOT authorized to extend or vary any warranties or guarantees beyond those outlined herein nor may the manufacturer's or seller's limitation of liability be waived or altered in any manner whatsoever.