

UNIVERSAL 1023

ONE PLANET • ONE PRODUCT • MULTIPLE USES



Resurfaces Spalled
& Pitted Concrete



Horizontal Patching
& Repairs up to 6"



Vertical & Overhead
Patching up to 2"



Protects Against
Water Seepage & Dampness



Crack Resistant Stucco Coat
over Masonry & Concrete



Basecoat for Stucco, Thin-
Brick & Thin-Stone Veneer



Edging for Pavers & Stone



Bedding Mortar for Stone
Treads, Coping and Slate



Decorative Coating for
Spray Decks and Walls

MADE IN

U. S. A.

 "The Professional's Choice"
UMACO
INC.

Toll Free: 800-442-5535
Phone: 978-453-8881
www.umaco.com

UNIVERSAL 1023

ONE PLANET • ONE PRODUCT • MULTIPLE USES

UNIVERSAL 1023 is a durable, fast-setting, cement-based, fiber-reinforced, polymer-modified, high-strength & water-resistant material which may be used for multiple applications. Universal 1023 is the most versatile product on the market which makes it the **ONE PRODUCT** you can't do without. See the list below which shows all the different ways Umaco Universal 1023 may be used.



- Resurfaces spalled & pitted concrete
- Horizontal repairs up to 6" thick
- Vertical & overhead repairs up to 2"
- Polymer-modified, fiber-reinforced and water-resistant
- Fast-setting (30 minutes)
- Retarder available for a slower set time
- Patch & repair concrete steps, headers & sills
- Available in Gray & White
- Underlayment for a variety of floor coverings & coatings
- May be brush or spray applied as a water-resistant coating
- A basecoat for stucco, thin-brick & thin-stone veneer systems
- A crack-resistant stucco coat which may be troweled or sprayed directly over concrete & masonry
- Bedding mortar for stone treads, coping and slate
- Pointing mortar for thin-stone veneer
- Edging restraint for concrete pavers and stone
- Decorative spray deck when applied over old & worn concrete
- May be used as a stampable overlay
- Works great as a glass block mortar
- May be integrally colored using Umaco Universal 1023 Pigments
- May be sealed with Umaco Color-Seal which is available in a variety of colors

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Refer to the index below in order to find the instructions pertaining to your specific application. Contact a Umaco representative with any questions.

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UNIVERSAL 1023

HORIZONTAL RESURFACING



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high-strength and water-resistant finish when applied as a patching, resurfacing and underlayment material from a feather-edge up to 6".

SURFACE PREPARATION

Concrete surfaces must be sound, clean and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

Wood Floors

Interior use only. Only apply over CDX, exterior grade 5/8" plywood which is clean, dust free, rigid and well fastened. Screw heads must be set below the surface. **Plywood surfaces must be primed with Umaco Bond All.**

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength and provide an easier working surface, **the surface must be primed with Umaco Bond All** prior to the placement of the Universal 1023.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer.

Only mix enough material that can be placed within 15-20 minutes.

For repairs over 1" in depth, the mix may be extended with up to 20 pounds of washed, course, 3/8" aggregate.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Apply a tight coat with a stainless steel trowel firmly pressing the material into all voids and pores. Immediately double back and apply a second coat from a feather-edge up to 6". The surface may be troweled, floated or broom finished once the material has set sufficiently.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist the area with water until the material sets to prevent a quick dry out. Universal 1023 (at 1/2" thick) will be ready for light foot traffic in 4-6 hours (70°F, 50%RH) and can be put into service in 12 hours or when the material has fully dried. Thicker patches may require up to 24 hours to cure.

Floor Coverings

Once material has sufficiently set and can be worked on without damaging the surface, most standard floor coverings

such as ceramic tile, VCT, sheet vinyl and carpeting can be installed.

Flooring which requires special adhesives can be installed after 24 hours (70°F, 50% RH). Always do a test patch to ensure the adhesive's compatibility and always follow the manufacturer's recommendations.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

APPROXIMATE COVERAGE 50# BAG

1/4".....	25 ft ²
1/2".....	13 ft ²

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

**For technical assistance call
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UNIVERSAL 1023

HORIZONTAL DEEP PATCHING



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high-strength and water-resistant finish when used for deep concrete patch repairs up to 6" thick.

SURFACE PREPARATION

Concrete surfaces must be sound, clean and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding). Any rusted or corroded steel rods or metal must be cleaned by wire brush or sand blasted making sure all rust is removed. Then apply a coat of Umaco Hydro-Gard 33 by brush to all cleaned and rust free steel and allow to dry for 6-8 hours (70°F, 50% RH) or until completely dry.

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength and provide an easier working surface, **the surface must be primed with Umaco Bond All** prior to the placement of the Universal 1023.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes. For repairs over 1" in depth, the mix may be extended with 20 pounds of washed, course, 3/8" aggregate.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Apply a tight coat with a stainless steel trowel firmly pressing the material into all voids and pores. Immediately double back and apply a second coat from a feather-edge up to 6". The surface may be troweled, floated or broom finished once the material has set sufficiently. **Please Note:** To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist the area with water until the material sets to prevent a quick dry out. Universal 1023 (at 1/2" thick) will be ready for light foot traffic in 4-6 hours (70°F, 50%RH) and can be put into service in 12 hours or when the material has fully dried. Thicker patches may require up to 24 hours to cure.

Floor Coverings

Once material has sufficiently set and can be worked on without damaging the surface, most standard floor coverings

such as ceramic tile, VCT, sheet vinyl and carpeting can be installed. Flooring which requires special adhesives can be installed after 24 hours (at 70°F, 50% RH). Always do a test patch to ensure the adhesive's compatibility and always follow the manufacturer's recommendations.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

APPROXIMATE COVERAGE 50# BAG

1/4".....25 ft²
1/2".....13 ft²

*Will yield approximately 0.45 cubic feet

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application.
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Always adhere to local building codes and regulations when using this product
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UNIVERSAL 1023

VERTICAL & OVERHEAD PATCHING



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high-strength and water-resistant finish when used for vertical and overhead concrete patch repairs up to 2" thick.

SURFACE PREPARATION

Concrete surfaces must be sound, clean and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding). Any rusted or corroded steel rods or metal must be cleaned by wire brush or sand blasted making sure all rust is removed. Then apply a coat of Umaco Hydro-Gard 33 by brush to all cleaned and rust free steel and allow to dry for 6 hours (70°F, 50% RH) or until completely dry.

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength, **the surface must be primed with Umaco Bond All** prior to the placement of the Universal 1023. Apply by brush, working the material into all cracks and crevices but do not allow to puddle.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Apply a tight coat with a stainless steel trowel working the material into all cracks, crevices and edges eliminating all air pockets. Patches over 2" need to be built up in successive layers. Each layer should be scratched and kept rough to ensure a good mechanical bond. Allow previous layer to cure for at least 12 hours (70°F, 50% RH) before applying another layer. Prime the surface with Umaco Bond All in between layers. Once the material has set sufficiently, float or finish to obtain desired texture.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

CURING

When working in direct sunlight, high temperature or in extremely windy conditions, lightly mist the area with water until the material sets to prevent a quick dry out.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

COVERAGE 50# BAG

1/4".....25 ft²
1/2".....13 ft²

*Will yield approximately 0.45 cubic feet

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

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UNIVERSAL 1023

STUCCO COAT OVER CONCRETE & MASONRY



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high-strength, water-resistant and decorative stucco finish when applied directly over vertical concrete and masonry surfaces.

SURFACE PREPARATION

Concrete surfaces must be sound, clean and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

Concrete Block and Brick

Differential suction between concrete masonry units (blocks or bricks) and the mortar joints may cause "ghosting" or "photographing" of the joint patterns after periods of rain. To ensure even absorption, apply two coats of Umaco Transeal WB using a roller then allow to dry for at least 24 hours (70°F, 50% RH) before applying Universal 1023.

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength and provide an easier working surface, **the surface must be primed**

with **Umaco Bond All** prior to the placement of the Universal 1023.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Apply a thin coat with a stainless steel trowel over the entire area within the control joints or within the area being worked, firmly pressing the material into all voids and pores. Immediately double back and apply a second coat to produce a level surface (with no trowel marks) at a minimum of 1/8" to a maximum of 1/2". Finish the entire panel or work area in one application with no overlaps or cold joints. Additional coats may be applied after 12 hours (70°F, 50% RH) to obtain the desired thickness. Prime the surface with Umaco Bond All in between coats. Once the material has set sufficiently, float or finish to obtain desired texture.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist the area with water until the material sets to prevent a quick dry out.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

COVERAGE 50# BAG

1/4".....	25 ft ²
1/2".....	13 ft ²

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

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UNIVERSAL 1023

STUCCO COAT OVER CEMENT-BOARD



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high-strength, water-resistant and decorative finish when applied directly over vertical cement-board.

SURFACE PREPARATION

Properly fasten the cement board following the manufacturer's instructions or as per the specifications of the chosen installation system making sure to follow all local building codes. Cement-board must be sound, clean and dry. Remove all dirt, dust or any other foreign material which might effect the bond. Recess heads of fasteners a minimum of 1/8" then strike flush with Universal 1023.

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength, **the cement-board must be primed with Umaco Bond All** prior to the placement of the Universal 1023.

BASECOAT

After cement-board has been primed with Umaco Bond All, apply a basecoat of fiberglass reinforced mesh fabric (4.3 oz) embedded in Umaco Universal 1023 over the entire area of cement board. Cut the mesh fabric into pieces that are manageable. Allow for a 2" overlap. Apply a 1/8" coat of Universal 1023 to the cement-board then trowel in the fabric mesh using a stainless steel trowel. Avoid trowel marks and ridges. Be certain that no wrinkles or mesh

fabric are visible through the Universal 1023. If mesh pattern is visible, skim the area with a light coat of Universal 1023. Allow basecoat to cure for a minimum of 24 hours (70°F, 50% RH) before applying the finish stucco coat.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

STUCCO COAT

Option 1: Umaco Universal 1023

Prime the entire surface with Umaco Bond All. Then apply the finish stucco coat of Universal 1023 up to 1/4".

Once the material has set sufficiently, float or finish to obtain desired texture.

Option 2: Umaco Finish-Coat Stucco

Make sure the basecoat is flat with no irregularities. Read Umaco Finish-Coat Stucco data sheet for specific instructions regarding proper application.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist the area with water until the material sets to prevent a quick dry out.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

APPROXIMATE COVERAGE 50# BAG

1/8".....	50 ft ²
1/4".....	25 ft ²

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

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UNIVERSAL 1023

STUCCO COAT OVER DRY-STACK BLOCK



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high-strength, water-resistant and decorative finish when applied over dry-stack concrete masonry units.

Please Note: Adhere to local building codes and regulations regarding dry-stack wall construction. Proper engineering may be required especially for walls over three feet.

SURFACE PREPARATION

Lay the first course of concrete block conventionally so that the wall will start level and plumb. Cut the joints flush and allow them to set for 24 hours (70°F, 50% RH). Dry-stack clean, new block in a running bond pattern for maximum strength unless otherwise specified. Remove any burrs or irregularities being careful to keep the stacked blocks level and plumb. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength and provide an easier working surfaces, **the dry stack block must be primed with Umaco Bond All** prior to the placement of the Universal 1023.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Using a stainless steel trowel, apply a thin coat of the mixed material (over both sides of the wall) firmly pressing the material into all voids and pores. Immediately double back and apply a second coat to produce a level surface at a minimum thickness of 1/4" up to a maximum thickness of 1/2".

Once the material has set sufficiently, float or finish to obtain desired texture.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist the area with water until the material sets to prevent a quick dry out.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

APPROXIMATE COVERAGE 50# BAG

1/4".....	25 ft ²
1/2".....	13 ft ²

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

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UNIVERSAL 1023

STUCCO COAT OVER RIGID INSULATION BOARD



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high-strength, water-resistant and decorative finish when applied directly over rigid insulation board.

SURFACE PREPARATION

Properly install the rigid insulation board as per the instructions provided by the rigid insulation board's manufacture or as per the specifications of the chosen installation system. Rigid insulation board must be sound, clean and dry. Roughen the surface of the rigid insulation board with a wire brush. Remove all dirt, dust or any other foreign material which might effect the bond. Prime the entire area with Umaco Bond All. Then using alkaline resistant fiberglass mesh, cover all joints. Completely embed the alkaline resistant fiberglass mesh using Universal 1023. Allow to cure at least 12 hours (70°F, 50% RH) before applying finish stucco coat.

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength, **the rigid insulation board must be primed with Umaco Bond All** prior to the placement of the Universal 1023.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Using a stainless steel trowel, apply a thin coat of Universal 1023 over the properly prepared rigid insulation board then immediately double back applying the Universal 1023 to the desired thickness. Apply Universal 1023 with a minimum thickness of 1/8" up to a maximum thickness of 1/4".

Once the material has set sufficiently, float or finish to obtain desired texture.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist the area with water until the material sets to prevent a quick dry out.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

APPROXIMATE COVERAGE 50# BAG

1/4".....	25 ft ²
1/2".....	13 ft ²

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

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UNIVERSAL 1023

BASECOAT OVER METAL-LATH



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high-strength and water-resistant basecoat for stucco, thin-brick, thin-stone and manufactured stone veneer systems when applied over 3.4 galvanized metal-lath.

SURFACE PREPARATION

Securely fasten the galvanized metal-lath as per the manufacturer's instructions or as per the specifications of the chosen installation system. Follow all local building codes.

For typical 16 inch on center framing, use only 3.4 galvanized metal lath.

Exterior-Grade Plywood Sheathing

All plywood sheathing (and studs) should be the proper grade and moisture content (typically below 20%) for construction in order to prevent unnecessary cracking. A 1/8" space should be provided between the edges of adjacent sheathing panels to allow for expansion.

CONTROL JOINTS

The location of control joints and other accessories should be determined by the designer or architect. Placement of control joints should be selected to correspond with lines of anticipated potential building movement such as at the corners of openings in the finish which includes vents, windows and doors. Panels should contain 144 ft² or less of surface area with no dimension greater than 18 feet in either direction or

a length ratio of 2-1/2 to 1. This will reduce the chance of shrinkage cracks and will allow the entire panel to be finished continuously with no overlaps or cold joints. Any existing control and expansion joints must be carried through the finish. Control joints are also required when two dissimilar substrates come together.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Apply a thin coat of Universal 1023 with a stainless steel trowel over the entire area within the control joints or within the area being worked, firmly pressing the material while **completely encasing** the metal-lath. Immediately double back and apply a second coat to produce a smooth and level surface (with no trowel marks) at a minimum of 1/8" to a maximum of 1/4". Finish the entire panel or work area in one application with no overlaps or cold joints. Additional coats may be applied after 12 hours (70°F, 50% RH).

Prime the surface with Umaco Bond All in between each coat.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist the area with water until material sets to prevent a quick dry out. Allow to cure a minimum of 24 hours (70°F, 50% RH) before applying stucco, thin-brick, manufactured stone or thin-stone veneers.

APPROXIMATE COVERAGE 50# BAG

1/4" 15-20 ft²

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

**For technical assistance call
978-453-8881**

www.umaco.com



UNIVERSAL 1023

BASECOAT OVER EPS BOARD



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high strength and water-resistant basecoat for stucco finishes when applied over EPS board. May also be used to adhere EPS board to properly prepared masonry, concrete and exterior grade plywood.

SURFACE PREPARATION

For Adhesive Applications

Substrates to which EPS boards will be adhered must be dry, sound and clean. Remove all dirt, dust, efflorescence, laitance or any other foreign material which might effect the bond. Masonry and concrete substrates must be flat within 1/4" in ten feet. Dampen concrete walls just prior to boards being placed. Universal 1023 may be used to adhere the EPS board, however if there is any doubt that a good bond can be achieved, mechanical fasteners must be used to attach EPS boards.

Basecoat Over EPS Board

EPS boards must be properly adhered/ attached to the substrate. If fasteners are required, follow manufacturer's instructions regarding proper installation. Recess heads of fasteners 1/8" then cover with Universal 1023.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump

free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Adhering EPS Board

Scratch both sides of EPS board with rasp, wire brush or saw blade. Apply Universal 1023 to the back of EPS board in mounds of at least 1/4" thick and 2" in diameter, making sure that the material covers a minimum of 50% of the board. An alternative method is to cover the entire back side of the board using a 3/8" notched trowel. After Universal 1023 has been applied to back side, place EPS board on wall and push firmly. Using a block of wood, apply equal and even pressure to allow maximum bond to be achieved. Apply EPS boards horizontally across entire wall in a running bond, staggering vertical joints, corners and sheathings. All gaps greater than 1/8" between EPS boards must be filled with slivers of EPS board. Rasp the entire wall to a flat surface within 1/4" in ten feet. Rout or groove all aesthetic joints and EPS board details after rasping.

After adhering EPS board to the wall, wait 24 hours (70°F, 50% RH) before applying basecoat.

Basecoat

Cut fiberglass reinforced mesh fabric into pieces that are manageable. For lightweight to medium weight fabrics, allow for a 2" overlap. Apply a minimum of a 1/16" coat of Universal 1023 to the EPS then trowel in the fabric mesh using a stainless steel trowel. An

alternative method would be to sandwich the mesh between two 1/32" coats of Universal 1023. Avoid trowel marks and wrinkles. If mesh pattern is visible, skim the area with a light coat of Universal 1023. Wait 24 hours (70°F, 50% RH) before applying stucco finishes.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Admix-35 using a spray bottle.

APPROXIMATE COVERAGE 50# BAG

Adhesive.....50-70 ft²

Basecoat.....100-120 ft²

LIMITATIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or complete loss of bond
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

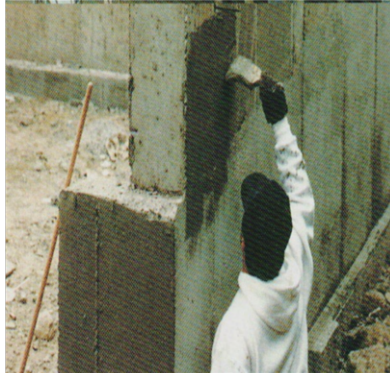
**For technical assistance call
978-453-8881**

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UNIVERSAL 1023

BRUSH OR SPRAY APPLIED WATER-RESISTANT COATING



UNIVERSAL 1023 may be applied as a water-resistant coating over a variety of properly prepared, vertical masonry and concrete surfaces. Universal 1023 penetrates and seals the pores and voids of concrete and masonry walls creating a permanent water-resistant barrier which prevents moisture migration above or below grade.

SURFACE PREPARATION

Concrete and masonry surfaces must be sound, clean and dry. All deteriorated mortar joints, large voids and cracks must be repointed or patched using Universal 1023 then allowed to cure for at least 12 hours (70°F, 50% RH). See page 6, **VERTICAL & OVERHEAD PATCHING**. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

New Concrete Foundations

Before applying Universal 1023 on a new concrete foundation, all rod ties

must be broken off close to the foundation, pushed back one to two inches and then filled with Umaco U-Plug. Honeycomb voids and any holes left in the foundation must also be filled with U-Plug to ensure proper waterproof protection.

MIXING

Mix each 50# bag of Universal 1023 with 6 quarts of clean potable water and one quart of **Umaco Addmix-35**. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free, pancake batter consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 30-40 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Lightly dampen surface with water immediately before applying Universal 1023 for ease of application. Allow water to absorb into surface but do not saturate. Universal 1023 may then be applied using a bristled masonry brush or by hopper spray gun equipment. Apply liberally filling all voids and pores in the substrate. When applied on concrete masonry units, a horizontal finished brush stroke is recommended to avoid brush marks. When applied on poured concrete, a vertical finished brush stroke will provide a neat finish. Two coats are required for proper water-resistant protection. Apply the second coat after 12 hours (70°F, 50% RH) or when the material fully dries.

CURING

When working in direct sunlight, high temperatures or in extremely windy

conditions, lightly mist the area with water until material sets to prevent a quick dry out.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

APPROXIMATE COVERAGE 50# BAG

Concrete.....200-300 ft² (per coat)
Brick or Block..... 200-250 ft² (per coat)

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

**For technical assistance call
978-453-8881**

www.umaco.com



UNIVERSAL 1023

BEDDING MORTAR FOR TREADS & COPING



UNIVERSAL 1023 may be used as a durable, fiber-reinforced, polymer-modified, high-strength and water-resistant bedding mortar when installing a variety of stone treads, coping and slate.

SURFACE PREPARATION

Concrete surfaces on which the stone treads or coping will be set must be sound, clean and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

Stone Treads or Coping

Prior to installation, ensure that the back side of each stone tread or coping (which will be set in the Universal 1023) is clean and free of dust, laitance or any other foreign material which might impede the bond. Lightly dampen the backs of each stone prior to application to prevent excessive absorption of moisture from the mortar.

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength and provide an easier working surface, **the surface to which the stone tread or coping will be adhered must be primed with Umaco Bond All** prior to the placement of the Universal 1023.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

For a 2" stone tread, apply a 1" bed of Universal 1023 over the entire surface of the concrete or masonry substrate. Keep in mind that every square inch of the tread (backside) should be in contact with the 1" bed of Universal 1023. If material skins over (not sticky), prior to placing the tread, remove and replace with fresh material. Lay the tread on the 1" bed of mortar pressing firmly in place. Using a gentle wiggling movement while pressing the tread will ensure a good bond. Level as need with the assistance of a rubber mallet. Clean any excess Universal 1023 that may ooze out of the joints. Allow to set until firm. Once firm, grout the joints with Universal 1023 .

APPROXIMATE COVERAGE 50# BAG

1/2".....14 ft²
1".....7 ft²

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

**For technical assistance call
978-453-8881**

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UNIVERSAL 1023

GLASS BLOCK MORTAR



UNIVERSAL 1023 provides a durable, fiber-reinforced, polymer-modified, high-strength and water-resistant mortar which may be used for setting a variety of decorative glass block.

- Easy to use, just add water
- Polymer-modified
- High-bond strength
- Provides water resistant finish
- Self-curing under normal conditions
- Available in Gray or White

It is important to follow glass block manufacturer's instructions regarding proper application and substrate compatibility.

SURFACE PREPARATION

All surfaces on which glass block are to be laid must be sound, clean and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength and provide an easier working surface, **the surface to which the glass block will be adhered must be primed with Umaco Bond All** prior to the placement of the Universal 1023.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Set glass block in a full bed of Universal 1023 as per the glass block manufacture's recommendations. Joints may be tooled after initial set. Glass blocks may then be washed using a sponge and clean water to remove any excess mortar and film.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist the area with water until material sets to prevent a quick dry out.

CLEANING

Avoid Universal 1023 from coming in contact with the surface during installation as it may leave residues that can leave a stain. If Universal 1023 does come in contact with the surface, clean off immediately using a wet rag without smearing or staining the surface.

APPROXIMATE COVERAGE 50# BAG

Glass Block Size	Pieces
6"x6" glass block.....	36
8"x 8" glass block.....	32
12"x12" glass block.....	18

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

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www.umaco.com



UNIVERSAL 1023

POINTING MORTAR FOR STONE VENEER



UNIVERSAL 1023 provides a durable, fiber-reinforced, polymer-modified, high-strength and water-resistant mortar which may be used to grout and repoint all types of masonry and stone veneers.

- Easy to use, just add water
- Polymer-modified
- High-bond strength
- Provides water resistant finish
- Horizontal or vertical joints
- Self-curing under normal conditions
- Available in Gray or White
- Can be blended with Universal 1023 Pigments if a color is desired

SURFACE PREPARATION

All joints to be pointed must be sound, clean and free of any loose mortar, dust, laitance or any other foreign material which might impede the bond. Existing mortar joints to be repointed must be cut back to a sound surface. Flush all joints with clean water or compressed air.

PRIMING

Prior to application, dampen the properly prepared mortar joints with clean water to the point of saturation but do not allow standing water prior to placing material.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Using a grout bag, fill the joints and all voids being careful not to smear any grout onto the face of the brick or stone. When mortar reaches a firm consistency, use a metal striking tool to rake the joints out to the desired depth while at the same time forcing the mortar into the joints so as to thoroughly seal the edges. After working the joints, use a whisk broom to smooth the joints and clean any loose mortar.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist the area with water until material sets to prevent a quick dry out.

CLEANING

Avoid Universal 1023 from coming in contact with the surface of the stone during installation as it may leave residues that can leave a stain. If Universal 1023 does come in contact with the surface, clean off immediately using a wet rag without smearing or staining the surface.

APPROXIMATE COVERAGE 50# BAG

Will yield approximately .45 cubic feet.

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Do not use Universal 1023 for pointing softer and older materials like historic brick or stone due to its high-strength.
- The type of mortar used for pointing any project should be determined by the designer or architect.
- Details of any wall assembly including the location of control joints, expansion joints, weep screeds, air & water barrier, etc. should be determined by the designer or architect
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

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UNIVERSAL 1023

DECORATIVE SPRAY OVER WALLS



UNIVERSAL 1023 creates a cost effective, colorful and textured vertical surface when applied over concrete using a hopper spray gun. A wide variety of finishes may be obtained from a simple knock-down to a stipple or smooth finish.

SURFACE PREPARATION

Concrete surfaces must be sound, clean and dry. All voids, cracks and damaged areas must be patched using Universal 1023 then allowed to cure for at least 12 hours (70°F, 50% RH). See page 6, VERTICAL & OVERHEAD PATCHING. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength and provide an easier working surface, **the surface must be primed with Umaco Bond All.**

UNIVERSAL 1023 PIGMENT PACK

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

MIXING

Mix each 50# bag of Universal 1023 with approximately 5 quarts of clean potable water. Gradually add dry material and (1) packet of **Umaco Universal 1023 Retarder** to liquid mixing completely for 1-2 minutes using a 1/2" drill (500-650 rpm) with a jiffy mixer to form a creamy, lump free consistency. Let rest for 2 minutes then remix. Only mix enough material that can be sprayed within 30 minutes.

BASECOAT

A smooth and level surface is required prior to spray-coat which may be obtained by applying a basecoat which can be sprayed on or applied with hawk and trowel.

Basecoat Application

After mixing, immediately fill the hopper and begin spraying in a circular motion, covering approximately 100% of the surface. Then knock down the material (using a trowel) producing a smooth and level surface. Allow to dry for a minimum of 24 hours (70°F, 50% RH) then lightly scrape area removing any ridges before applying spray-coat.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

SPRAY-COAT

Alterations of air pressure, spray gun orifice size, and trowel techniques will yield numerous finishes.

Knock-Down Application

After mixing, immediately fill the hopper and begin spraying in a circular motion, covering approximately 75% of the surface. Then knock down the material (using a trowel) just as soon as it begins to stiffen. Allow to dry for a minimum of 24 hours (70°F, 50% RH). Lightly scrape area removing any ridges.

APPROXIMATE COVERAGE 50# BAG

Basecoat (1/8").....50-75 ft²
Spray-Coat (Knock-Down)75-100 ft²

CURING

When working in direct sunlight, high temperatures or extremely windy conditions, lightly mist the area with water until material sets to prevent a quick dry out.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application.
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

**For technical assistance call
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www.umaco.com



UNIVERSAL 1023

DECORATIVE SPRAY-DECK OVER CONCRETE



UNIVERSAL 1023 creates a cost effective, colorful and textured surface when applied using a hopper spray gun over worn or dull concrete without the cost of full removal. Ideal product to use for resurfacing pool decks, driveways, patios, walkways and more.

SURFACE PREPARATION

Concrete surfaces must be sound, clean and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

Existing Concrete

All voids, cracks and damaged areas must be repaired. Contact a Umaco rep to discuss proper crack repair. Apply a basecoat over spalled or pitted concrete producing a level surface. Read section ahead under the title of **BASECOAT**.

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength and provide an easier working surface, **the surface must be primed with Umaco Bond All.**

UNIVERSAL 1023 PIGMENT PACK

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

BASECOAT

Mixing

In a clean 5G pail, add one quart of **Umaco Addmix-35** and five quarts of clean, potable water. Gradually add a 50# bag of Universal 1023 and (1) packet of **Umaco Universal 1023 Retarder** to liquid mixing completely for 1-2 minutes using a 1/2" drill (500-650 rpm) with a jiffy mixer to form a creamy, lump free consistency. Let rest for 2 minutes then remix. Only mix enough material that can be placed within 30 minutes.

Application

Immediately after mixing, pour the Universal 1023 from the mixing pail onto the concrete surface. A trowel or squeegee can be used for the distribution of the product. Apply a smooth & even coat over the entire area up to 1/8" thick. Allow basecoat to dry for a minimum of 24 hours (70°F, 50% RH). Lightly scrape area removing any ridges then vacuum before spray-coat.

SPRAY-COAT

Mixing

Mix each 50# bag of Universal 1023 with approximately 5 quarts of clean potable water. Gradually add dry material and (1) packet of **Umaco Universal 1023 Retarder** to liquid mixing completely for 1-2 minutes using a 1/2" drill (500-650 rpm) with a jiffy mixer to form a creamy, lump free consistency. Let rest for 2 minutes then remix. Only mix enough material that can be sprayed within 30 minutes.

Application

After mixing, immediately fill the hopper and begin spraying in a circular motion, covering approximately 75% of the surface. Then knock down the material (using a trowel) just as soon as it begins to stiffen. Allow to dry for a minimum of

24 hours (70°F, 50% RH). Lightly scrape area removing any ridges then vacuum the entire area before sealing.

APPROXIMATE COVERAGE 50# BAG

Basecoat.....200-300 ft²
Spray-Coat.....75-100 ft²

CURING

When working in direct sunlight, high temperatures or extremely windy conditions, lightly mist the area with water until material sets to prevent a quick dry out.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application.
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

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UNIVERSAL 1023

MICRO-TOPPING OVER CONCRETE



UNIVERSAL 1023 produces a durable, fiber-reinforced, polymer-modified, high-strength and water-resistant finish when applied over concrete as a micro-topping from 1/16" up to 1/8". When used as a micro-topping, Universal 1023 will restore old and worn concrete by filling in the surface defects such as spalls, gouges and pitting. A variety of textures may be achieved including a trowel finish, a broom finish or scroll finish.

SURFACE PREPARATION

Concrete surfaces must be sound, clean and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

PRIMING: UMACO BOND ALL

In order to achieve exceptional bond strength and provide an easier working surface, **the surface must be primed with Umaco Bond All** prior to the placement of the Universal 1023.

MIXING

In a clean five gallon container, add one quart of **Umaco Addmix-35** and five quarts of clean, potable water. Gradually add a 50# bag of Universal 1023 and (1) packet of **Umaco Universal 1023 Retarder** to liquid mixing completely for 1-2 minutes using a 1/2" drill (500-650 rpm) with a jiffy mixer to form a creamy, lump free consistency. Let rest for 2 minutes then remix. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Immediately after mixing, pour the Universal 1023 from the mixing pail onto the concrete surface. A trowel, gauge-rake or squeegee can be used for the distribution of the product. Maximum thickness for Universal 1023 when used as a micro-topping is 1/8" inch. Once the material has set sufficiently, the surface may be troweled, broom finished (for a reduced slip surface) or it can also be scroll finished for a more decorative look.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

CURING

When working in direct sunlight, high temperatures or extremely windy conditions, lightly mist with water until material sets to prevent a quick dry out. Universal 1023 (at 1/2" thick) will be ready for light traffic in 4-6 hours (70°F, 50%RH) and can be put into service within 12 hours or when the material has completely dried.

Floor Coverings

Once material has sufficiently set and can be worked on without damaging the surface, most standard floor coverings such as ceramic tile, VCT, sheet vinyl

and carpeting can be installed. Flooring which requires special adhesives can be installed after 24 hours (70°F, 50% RH). Always do a test patch to ensure the adhesive's compatibility and always follow the manufacturer's recommendations.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

APPROXIMATE COVERAGE 50# BAG

1/16".....	100 ft ²
1/8".....	50 ft ²

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Always adhere to local building codes and regulations when using this product
- Review Safety Data Sheet as well as the warnings listed on page 22 before using this product

For technical assistance call
978-453-8881

www.umaco.com



UNIVERSAL 1023

EDGING FOR CONCRETE PAVERS



UNIVERSAL 1023 may be used as a durable, fiber-reinforced, polymer-modified, high-strength and water-resistant concrete edge restraint for pavers, stone and porcelain applications on an open graded, permeable base.

- Fiber-reinforced to resist cracking
- Polymer-modified
- High-strength
- No spikes required

SURFACE PREPARATION

Remove bedding layer on the entire perimeter of the installation where Universal 1023 will be installed. Remove bedding material all the way down to the base material, keeping in mind the final slope that needs to be achieved. The base material should extend 6-8" beyond the paver's edge.

Please Note: Universal 1023 is to be installed only on the base layer and not on the bedding layer.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Add dry material (gradually) to water mixing completely for 1-2 minutes to form a creamy, lump free consistency. Let rest for 2 minutes then remix. For best results, mechanical mixing is preferred using a 1/2" drill (500-650 rpm) with a jiffy mixer. Only mix enough material that can be placed within 15-20 minutes.

Universal 1023 Retarder

For a slower set time, add (1) packet to each 50# bag while mixing.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Distribute the freshly mixed Universal 1023 along the edge of the pavers or natural stone. Be sure to place enough material to form a triangular profile that will extend approximately half way up the pavers or natural stone. Using a hand trowel, form Universal 1023 into the triangular profile. The top of the troweled Universal 1023 should extend away from the pavers or natural stone at approximately a 45° angle. Compact the pavers or natural stone before Universal 1023 sets up. Install appropriate joint material per manufacturer instructions. For porcelain tile or thin set pavers, install Universal 1023 so that it finishes just below the top of the surface.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

CURING

When working in direct sunlight, high temperatures or in extremely windy conditions, lightly mist with water until material sets to prevent a quick dry out.

Back-Filling

Allow Universal 1023 to cure for a minimum of 12 hours (70°F, 50% RH) before backfilling with topsoil, mulch or decorative stone. Walkways can be used after backfilling. Driveways can be used after 48 hours. Avoid walking or driving near the edge until Universal 1023 has fully cured.

CLEAN UP

Avoid Universal 1023 from coming in contact with the surface of the pavers during installation as it may leave residues that can leave a stain. If Universal 1023 does come in contact with the surface, clean off immediately using a wet rag without smearing or staining the surface. Wash tools immediately after use with clean water.

APPROXIMATE COVERAGE 50# BAG

Concrete Pavers.....17 linear feet

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Always adhere to local building codes and regulations when using this product
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UNIVERSAL 1023

STAMPABLE OVERLAY



UNIVERSAL 1023 may be used as a fast-setting, durable, fiber-reinforced, polymer-modified, high-strength and water-resistant stampable overlay (up to 1" thick) when applied over properly prepared concrete surfaces.

SURFACE PREPARATION

Concrete surfaces must be sound, clean and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, rust, paint or any other foreign material which might effect the bond. Umaco Ultra-Clean may be used to remove oil or grease stains from concrete surfaces and may also be used as an all purpose cleaner prior to application. A rough profile and porous surface are required for proper adhesion which may be obtained by lightly etching the concrete using Umaco Ultra-Etch or by using mechanical means (dustless grinding).

PRIMING: BOND ALL EXTERIOR

In order to achieve exceptional bond strength and provide an easier working surface, **the surface must be primed with Umaco Bond All** prior to the placement of the Universal 1023.

MIXING

Mix each 50# bag of Universal 1023 with approximately 4-1/2 quarts of clean potable water. Gradually add a 50# bag of Universal 1023 and (1) packet of **Umaco Universal 1023 Retarder** to liquid mixing completely for 1-2 minutes using a 1/2" drill (500-650 rpm) with a jiffy mixer to form a creamy, lump free consistency. Let rest for 2 minutes then remix. Only mix enough material that can be placed within 30 minutes.

Universal 1023 Pigment Pack

Universal 1023 may be integrally colored by adding (1) pigment pack to a 50# bag while mixing. Refer to page 23.

APPLICATION

Once material is thoroughly mixed, apply a tight coat with a stainless steel trowel firmly pressing the material into all voids and pores. Immediately double back and apply a second coat up to 1". It is very important to apply material at a consistent thickness when using stamping tools.

Please Note: To prevent the material from dragging when troweling, lightly mist the area with Umaco Addmix-35 using a spray bottle.

STAMPING OR TEXTURE ROLLER.

Imprinting time will vary depending on temperature, humidity and thickness. Begin stamping or texture rolling as soon as mixture sets sufficiently to achieve a clean impression.

Use liquid release prior to placing stamps or texture roll.

CURING

When working in direct sunlight, high temperatures, extremely windy conditions or over very porous surfaces, lightly mist the area with water until material sets to prevent a quick dry out. Universal 1023 stamped overlays (at 1/2" thick) will be ready for light foot traffic in approximately 24 hours (70°F, 50%RH) or when the material has fully dried.

Sealing

Universal 1023 may be sealed using Umaco Color-Seal, Ultra-Seal 550 or any other Umaco approved product after 48 hours (70°F, 50% RH) or when surface is fully dried. Refer to page 23.

APPROXIMATE COVERAGE 50# BAG

1/2".....	12 ft ²
1".....	6 ft ²

PRECAUTIONS

- Apply only when the ambient and surface temperatures are between 45°F - 85°F and will remain so for at least 24 hours after application
- Do not apply if rain, snow or any other precipitation is expected within 24 hours
- Concrete surfaces subject to high levels of moisture vapor transmission should be treated with Umaco Hydro-Stop 25 prior to application to prevent discoloration, delamination or a complete loss of bond
- All control and expansion joints must be carried through
- Always adhere to local building codes and regulations when using this product
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UNIVERSAL 1023

Technical Data & Warranty

TECHNICAL DATA

Set Time

Initial.....30 minutes
Final.....2 hours

Compressive Strength (ASTM C-109)

28 Days.....5251 psi

Flexural Strength (ASTM C-348)

28 Days.....1171 psi

Tensile Strength (ASTM C-190)

28 Days.....545 psi

Density

Wet.....128 pcf

Water Penetration

3 Day Soak.....1/2 inch

Testing Sample: 4.5 quarts of water mixed with 50 lbs. of Universal 1023

WARNING!

Avoid breathing dust. This product contains Portland cement and silica which may cause cancer or delayed lung injury (silicosis). Avoid eye contact or prolonged contact with skin. In case of eye contact, flush with plenty of water for at least fifteen minutes. If irritation persists, seek immediate medical attention. Wash hands and skin thoroughly with water after handling. If irritation persists, seek immediate medical attention. Do not take internally. If ingested, seek immediate medical attention. NIOSH approved dust respirator, eye protection and gloves are recommended when using this product.

24 Hour Emergency Medical/Spill Information (Chemtrec): 800-424-9300

KEEP OUT OF THE REACH OF CHILDREN!

WARNING! If you scrape, sand or remove old paint, you may release lead dust or fumes. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.**

Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log onto www.epa.gov/lead. Wear a properly fitted respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

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LIMITED WARRANTY

The manufacturer guarantees its products to be free of defects and the extent of its liability is limited to the purchase price of the materials only, if proved to be defective. Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturers or its dealers responsibility. There are no other guarantees either expressed or implied.



OTHER UMACO PRODUCTS USED IN CONJUNCTION WITH UNIVERSAL 1023

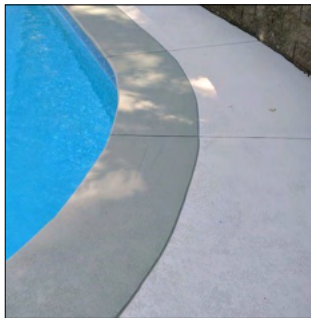


UNIVERSAL 1023 PIGMENTS

Universal 1023 Pigments may be used to integrally color Umaco Universal 1023. Each pigment pack is pre-measured so all you need to do is simply blend one pigment pack with a 50# bag of Universal 1023 Gray in order to achieve the desired color.



Pigment Pack Colors



COLOR-SEAL

An interior/exterior grade, colored, water-based, water-resistant, acrylic sealer designed to be applied over concrete, brick, block, stucco & concrete pavers. Color-Seal provides excellent adhesion, hot tire resistance and provides long lasting protection.



Color Chart



ULTRA-SEAL 550

An interior/exterior grade, water-based, colored, high-solids, single-component, acrylic sealer which exhibits excellent adhesion and penetration when applied over new and existing concrete surfaces. Ultra-Seal 550 provides extreme durability even in industrial settings. Available in a variety of colors.



Color Chart



BOND-ALL

An exterior/interior grade, water-based, surface bonding agent applied prior to placing new Portland cement based mixes & plaster over masonry, concrete, stone, plaster, drywall, wonder-board, precast concrete, wood, tile & EPS board. May be applied for vertical & horizontal applications.



ADDMIX-35

Addmix-35 is a specially formulated combination of polymers & modifiers designed to enhance the properties of cement based mixes. When added to cement-based mixes, Addmix-35 increases flexural, compressive & tensile strengths as well as the adhesive bond.



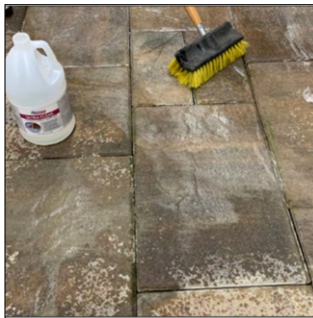
UNIVERSAL 1023 RETARDER

A special additive (in dry powder form) specifically designed to slow the set time and extend the pot life of Universal 1023. For a slower set time and a longer pot life, add one packet of Universal 1023 Retarder to each 50# bag of Universal 1023 while mixing.



HYDRO-STOP

A single-component, permanent, VOC Free, cost effective solution that protects finished flooring, coatings, and adhesives from concrete slabs containing up to 100% relative humidity (calcium chloride readings reaching 25 pounds). May be applied at the time of the concrete pour or over new and existing concrete



ULTRA-CLEAN

An environmentally safe, 100% biodegradable solution used to clean concrete, concrete pavers & retaining wall block. Ultra-Clean safely & effectively removes dirt, oil, grease & grime. Helps clean & prepare concrete surfaces prior to the application of protective sealants, coatings and cement overlays. Does not need to be neutralized.



ULTRA-ETCH

An environmentally safe, organic, 100% biodegradable, non-fuming solution used to lightly etch concrete surfaces prior to the application of protective sealants, coatings and cement overlays. Ultra-Etch can be used in place of harmful acids such as hydrochloric, sulfuric & muriatic acid. Does not need to be neutralized.



Umaco Product Brochure



60 Rear Newhall Street
Lowell, MA 01852
Toll Free: 800-442-5535
Phone: 978-453-8881
www.umaco.com



Umaco Website

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