

Power Force Prep

magnetically receptive skim coat

1. PRODUCT NAME

intelli-force magnetix™ Power Force Prep

2. PRODUCT DESCRIPTION

Power Force Prep is a unique skim coating material that is a one-step flooring prep and installation system. This product features “Prep & Step Technology” allowing immediate return to service for new flooring by eliminating adhesives normally required with standard flooring installation methods. A wide variety of magnetic flooring and wallcoverings is available for use with this magnetic adhesion system.

Features and benefits

- Magnetically receptive for any magnetic flooring or wall installation
- Completely green product attributes, recyclable packaging
- Never use adhesives again
- Easy spread, perfect finish, sand as needed, fast setting
- Use to patch saw cuts, cracks & imperfections in floor slabs
- Build from feather edge to over 1” in one lift
- Ramp for sloping surfaces from over 1” down to feather edge
- Install over substrates up to 99% RH
- Flexible high bonding, non-cracking or shrinking polymer resin matrix
- Use over most any floor substrate, including concrete, sealed concrete, cementitious underlayments and backer boards, plywood, OSB board, or gypsum toppings
- Install directly over existing adhesives, no more demolition
- Install over existing well bonded flooring, including asbestos, even bonds directly to Porcelain Tiles
- Install on vertical surfaces including masonry or concrete block
- Up to 70 square feet of coverage, depending on substrate
- All components in a single pre-measured kit, no need for water

PHYSICAL PROPERTIES

DENSITY:	11.02 lbs/unit
SOLIDS (WT. %):	75% formulated
SHEER STRENGTH:	455 p.s.i.
REDUCER:	Water
FLEXURAL STRENGTH (%):	50%
DRY MILS:	16 mils
COMPRESSIVE STRENGTH:	
SHELF LIFE:	12 months

Packaging

Unit contains: One bag (8lbs) Powder
36 oz. container Liquid

Spread Rates

70 square feet per unit over smooth substrates. Rough or porous surfaces will reduce the spread rate accordingly. Always test for magnetic attraction post installation. An additional coat can be applied if required. There is no recoat window, additional coats or lifts can be added at any time.

3. APPROPRIATE APPLICATIONS

Power Force Prep is only to be used on building interior applications, including floors, horizontal and vertical surfaces. Beautiful, aesthetic, magnetic architectural finishes and building elements can be installed and easily exchanged by use of this magnetic adhesion system. Residential and commercial buildings provide many cost saving, sustainable opportunities for magnetically applied building elements. Power Force Prep is the quick, simple way to achieve this approach. The system can be installed in any occupied building with virtually no disruption.

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Suitable Substrates (Vertical & horizontal)

- Bare Concrete
- Sealed Concrete
- Plywood
- OBS Board & Underlayment Boards
- Cement Backer Board
- Cementitious SLU's
- Gypsum Toppings
- Existing Adhesives
- Existing well bonded vinyl flooring
- Existing Ceramic and Porcelain tiles
- Asbestos tile flooring
- Vertical Surfaces
- Gypsum wall board
- Concrete block walls

Examining Substrates

It is important to examine all substrate surfaces for suitability of application. All loose materials, adhesives, spalling of concrete, peeling coatings, waxes, oil or grease residue and any other deleterious sealers or contaminants should be removed from any surface to be coated. Concrete floor substrates must be in compliance with ACI 201.2R-01 "Guide to Durable Concrete." Slabs should be structurally sound in compliance with current industry standards for mix designs and placement. Particular attention should be paid to red flags such as spalling or aggregate "pop-outs" which could be an indicator of ASR, Alkaline Silica Reaction. Contact IFM Tech Services if any red flags are present prior to any installation. Existing, failing floorcoverings or wall coatings are definite examples of red flags. When apparent defects or contamination is present, forensic testing of sample cores taken from the affected areas is strongly recommended. Verify that all substrate patching compounds for floors or taping compounds for walls are fully cured prior to application. *See the Kwikrez Power Force Prep Limited Warranty for specific related limitations.

Substrate Moisture Content Testing

All concrete floor slabs should be tested for relative humidity and alkalinity levels. Moisture testing should follow ASTM F2170 In Situ RH probe method for measuring relative humidity in concrete floor slabs. RH levels should not exceed 99% RH. If levels do exceed 99% RH contact IFM Tech Services at 877-277-9100. Test for alkalinity levels using ASTM F710 test method utilizing a digital test meter. Levels of pH should not exceed 12. If pH levels exceed 12 contact IFM Tech Services at 877-277-9100. See Kwikrez Power Force Prep Limited Warranty for specific related limitations.

Ambient Conditions

Particular care should be taken to ensure the building envelope / ambient conditions are appropriate for the application of Power Force Prep. Ambient air temperatures should be between 55°F and 90°F or 12°C to 32°C. Dew point should exceed more than seven degrees from the air temperature measured in the application area. Ambient air humidity levels should be less than 85% RH. Levels over 55% RH will affect drying, recoat and final curing times. Verify the product has fully cured between any recoats or application of any magnetic finishes.

Material Handling and Storage

All Power Force Prep materials should be inspected prior to installation. First, that all packaging is intact without breach or leakage. If transport temperatures to the site are extreme, allow Power Force Prep to acclimate to the ambient building envelope conditions for 24 hours prior to application. Do not store or stage materials in exceptionally hot or cold temperatures.

Always protect this product from freezing.

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4. INSTALLATION CONSIDERATIONS

Tools and Equipment

You can reference the Power Force Prep installation instructions for the full list of specific tools and equipment. In general, use an appropriate flat trowel for finishing cementitious products. It is important to have a variable speed mixing drill and a “Jiffy Mixer” attachment for properly blending the coating and the ferrosilicon powder additive. The Power Force Prep Installation Manual can be found under downloads on the intelli-force magnetix™ website.

Visit www.intelliforcemagnetix.com

Inspection and Recording Batch Code Information

All containers should be inspected for damage and products examined thoroughly prior to installation. Contact IFM Tech Services at 877-277-9100 with any questions relating to product integrity. Record all product batch codes found on the packaging and maintain for warranty compliance.

Surface Preparation

Concrete Floors: Slabs must comply with ACI 201.2R-01 “Guide to Durable Concrete” Normal preparation can be achieved by lightly sanding the substrate with a medium pad or screen to clean and lightly abrade or scuff the surface. Vacuum surface to remove dust or debris. Remove all loose existing adhesives, de-bonded coatings, contamination of any type, oil or grease residue, efflorescence, floor wax, or any sealer that could potentially create a bonding issue for Power Force Prep. When in question bond tests should be considered. Contact IFM Tech Services @ 877-277-9100 with questions relating to floor preparation. Patch all minor floor imperfections using Power Force Prep. Floors with excessive profile, deviation or undulations can be smoothed into tolerance by use of a polymer modified cementitious self-leveling underlayment.

Cracks and Joints: Non-moving cracks less than ¼” in width, joints and saw cuts can be filled with Power Force Prep provided the slab is stable, fully cured, and

has a moisture content up to 99% RH (refer to substrate moisture testing requirements in the previous section). A functioning sub-slab moisture barrier with a perm rating of less than .1 perm is required. If moisture permeance over 99% RH through cracks, joints and saw cuts is a potential, fill with a two component, moisture tolerant epoxy mixed with a thickening agent such as KOSTER TA. For questions regarding filling of cracks, joints and saw cuts, contact IFM Tech Services @ 877-277-9100.

Dynamic or Moving Joints: Active, moving joints and dynamic cold joints should be honored through the entire flooring system. The void should be cleaned and then filled with a flexible sealant using a mechanical expansion joint cover over it. The Power Force Prep is then applied with the finished flooring system properly fitted to the mechanical joint.

Wood Surfaces: Wood should be primed with an appropriate wood primer, allowed to cure prior to application of Power Force Prep. Rough and porous surfaces will require additional coats to achieve the proper magnetic grip. Plywood and OSB board and Cement board underlayments can be skim coated with Power Force Prep. Make sure all fasteners are set below the substrate surface. Prefill any large gaps between underlayment sheets using Power Force Prep. For added strength and flexibility at seams, apply mesh tape over the seams prior to skim coating.

Masonry Surfaces: First, any protruding edges, joints, mortar, grouts, etc. should be mechanically ground smooth (always using proper PPE). All masonry surfaces or concrete block (CMU) and mortar joints can be filled with Power Force Prep. Unfilled masonry or block will affect spread rates of the product. Additional product will be required to provide the appropriate mil thickness to achieve the required magnetic bond strength of the system.

Gypsum Floor Toppings: First, primer the gypsum surfaces with Kwikrez AcryliKote primer at a minimum of 200 square feet per gallon. Then apply Power Force prep in a skim coat layer.

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Existing Adhesives: Scrape adhesive substrate with a razor scraper to remove any high adhesive ridges or trowel marks. Make sure all loose adhesives are completely removed. Vacuum the surface thoroughly to remove residual adhesives or dust left behind from the scraping process. Apply Power Force Prep in a skim coat adjusting the spread rate based upon the surface profile being covered. As a rule, a minimum average of 2.0 mm should be applied over existing adhesives. Never apply Power Force Prep over wet or emulsified adhesives.

Porcelain or Ceramic Tiles: Make sure surfaces are clean and free from soap build up or sealers. Apply Power Force prep as a skim coat, completely filling grout joints and leaving a minimum of 16 mils thickness over the tile surface. For increased bond strength in high traffic areas, use a primer such as KOSTER "06" primer prior to skim coating.

Existing well bonded Flooring including Asbestos: First, it is critical to examine all existing flooring to ensure it is well bonded and adhered to the substrate surface. Pull tests should be conducted on any questionable surface. Remove any loose flooring and pre-fill the void with Power Force Prep, allow to cure. Remove all existing waxes sealers or contamination. If removal using a wax stripper is required, make sure all residual stripper residue is removed and that the entire surface is given time to dry, including seams between tiles. Apply Power Force Prep in a skim coat method.

Gypsum Wall Board for Magnetic Base and wall repairs: Remove any existing built-up base adhesives from the drywall surface. Remove any loose or deteriorated gypsum board or paper facing. Vacuum as required to remove dust or loose gypsum. Using a putty knife, prefill any voids or missing drywall. Mesh tape can be used for larger gaps. Spread the Power Force Prep on the surface using a base trowel or a spreader tip on a bulk caulking cartridge gun.

Mixing

Power Force Prep is mixed in the same manner for any application. **It is critically important that the mixing instructions are explicitly followed in the exact order of progression.** All the product components are premeasured and should not be extended or diluted. (See the Power Force Prep Installation Guide for mixing instructions, tools and equipment required.)

Step #1: Open the powder container and pre-blend the powder using a low-speed drill and jiffy type mixing wand. Mix for approximately 30 seconds.

Step #2: Pre-mix the blending liquid in the same manner for 30 seconds making sure the product is homogeneous and that there is no settlement on the bottom of the mixing container.

Step #3: Slowly add the blending liquid into the blended powder while mixing the two components together at a moderate speed with the drill and mixing wand. Mix product for 1- ½ minutes (90 seconds or longer if required) to ensure the material is completely blended and that no unmixed powder or clumps are visible anywhere within the mixed product. The product is now ready to use.

Product Application

Power Force prep can be used as a magnetically receptive skim coat or as a troweled thinset type material depending upon the finished floor or wall product being installed.

Skim Coating: Power Force Prep can be used to install magnetic LVT, LVP, Rubber, Cork, Carpet tiles or other magnetic sheet products. After mixing the product, apply the mixed material to the surface and spread using a flat, patch or finishing trowel. Make sure to follow appropriate spread rates not exceeding 70 square feet per kit over smooth or sealed surfaces. Allow additional material to fill voids, floor imperfections, trowel marks from previous adhesive layers. For CMU concrete block walls use the same flat trowel method being sure to fill all mortar joints. For very porous or rough masonry surfaces apply a second coat to ensure a smooth and even surface for application of magnetic wall systems.

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Troweled applications

Power Force Prep can be used to install Porcelain, ceramic and stone tiles or wood flooring used as a magnetically receptive thinset setting mortar. (See the Power Force Prep Installation Guide for tools and methods for each)

Choose a notched trowel appropriate to apply enough material to fill minor substrate surface undulations. For generally smooth surfaces a 1/4 X 3/8 X 1/4 square notched trowel is recommended. This will place enough of a mortar bed to level the tiles, making sure there is no lippage between tiles. The same trowel can be used for wood installations as well. Longer wood planks will likely require a larger notch to accommodate full contact of the wood plank into the Power Force Prep.

Troweled applications are best installed in a wet set method. Install the finished flooring or wall product directly into the wet Power Force Prep setting bed. Installation of magnetic vinyl base is also wet set, then rolled to smooth the base surface eliminating trowel marks from telegraphing through the base surface. Subsequent installations can be magnetically adhered to the cured Power Force Prep surface. The surface will be flat and smooth for the next installation. If installing LVT over a previously troweled Power Force Prep installation, flat trowel new Power Force Prep over the surface to infill any trowel mark voids. You can then either wet set or dry set the new flooring or wall product.

Safety, Cleanup and Disposal

Always use appropriate personal protection (PPE) designated by the installation at hand. Gloves, eye protection, dust masks or respirators for spray applications are strongly suggested. Always follow all current OSHA guidelines for methods and equipment. Kwikrez Power Force Prep is easily cleaned with warm, soapy water. Always clean the coating from surfaces with inadvertent splashes, drips, overspray immediately. Do not allow product to dry on such surfaces. Dispose of in accordance with local, state, and federal regulations.

Storage and Shelf Life

Store any unused, unblended materials in a dry, environmentally controlled area. Always protect the Kwikrez Power Force Prep from freezing. The shelf life for unblended Power Force Prep is 12 months (one year) from date of manufacturing as contained within the batch code.

5. AVAILABILITY AND TECHNICAL SERVICES

To find the nearest dealer, distributor or supplier of Power Force Prep, or request technical assistance visit the intelli-force magnetix™ website at www.intelliforcemagnetix.com, email info@ifminnovates.com or call toll free @ 877-277-9100.

6. LIMITED WARRANTY

Kwikrez Power Force Prep carries a One Year Limited Warranty. For terms, conditions, exclusions and coverages visit the intelli-force magnetix™ website. www.intelliforcemagnetix.com

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