



3000

DS-051.0-0312



1. PRODUCT NAME

DRYTEK® 3000

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

DRYTEK 3000 is a revolutionary, fast-setting, lightweight, deep-fill underlayment made from a proprietary blend of portland cement and specialized aggregate. DRYTEK 3000 is easy to mix and can be placed from 3/4" –6" (19 – 152 mm) in a single lift and capped with a DRYTEK self-leveling underlayment or topping.

Advantages

- Pourable and pumpable
- Fast drying
- Interior applications
- Ultra lightweight
- Can be pumped or barrel mixed and hand applied
- Achieve extremely deep fills without compromising load constraints
- Fill with DRYTEK 3000 and cap with a DRYTEK self-leveling underlayment

Suitable Substrates (Interior Use Only)

- Concrete
- Exterior glue plywood*
- Ceramic tile*
- Vinyl**

* See 5. Installation—Surface Preparation. ** See Section 5 Installation Over Vinyl Tile

Packaging

34 lb (15.4 kg) bag/21 bags per pallet

Color

Grey

Approximate Coverage

Yield/coverage is only an estimate and may vary depending on the amount of water, mixing equipment, temperature and field conditions.

34 lb (15.4 kg) bag

Nominal Thickness	Approximate Coverage
3/4" (19 mm)	25 ft ² (2.3 m ²)
1" (25 mm)	19 ft ² (1.8 m ²)
2" (51 mm)	9 ft ² (0.8 m ²)
3" (76 mm)	6 ft ² (0.6 m ²)
6" (152 mm)	3 ft ² (0.3 m ²)

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for six (6) months* if stored off the ground in a dry area.

* High humidity will reduce the shelf life of bagged product.

Limitations

- DRYTEK 3000 may be installed for either interior or exterior applications. For interior applications, the product must always be topped with a DRYTEK self-leveling underlayment.
- Do not install when surface temperature is below 40°F (4°C).
- Do not install over painted or gypsum-based surfaces.

- Do not exceed recommended mixing ratio as indicated in mixing instructions. Over watering may weaken product properties.
- Never mix with cement or admixtures.
- Do not apply DRYTEK 3000 over waterproofing or crack isolation membranes.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEMS).
- Do not bond directly to luan, OSB, particle board or Masonite® surfaces.
- Not for use in submerged applications
- DRYTEK DM1 Reinforcement Mat or 3.2# diamond metal lath must be used when installing over wood substrates.
- DRYTEK 3000 should not be installed over any moving joints or structural cracks (cracks greater than 1/16" [1.5 mm] in width or any crack that experiences any vertical displacement). All existing expansion joints, cold joints and control joints must be brought up through the underlayment and the finish. Failure to honor movement joints will result in cracking and/or loss of bond.
- Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations where L=span length (except where local building codes specify more stringent deflection requirements)

Cautions

Before using any DRYTEK product:

- Check www.drytek.com for any technical bulletins or updated information about the product and its application
- Contact your local DRYTEK Technical Sales Representative with any questions.
- During cold weather, protect finished work from traffic until fully cured.
- Contains portland cement. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.

4. TECHNICAL DATA

Physical Properties

COMPRESSIVE STRENGTH ^A	4350 PSI (30 MPA) WHEN CAPPED WITH DRYTEK 7200
INSTALLED DENSITY (INITIAL, 100%RH)	31 LB / FT ³ (497 KG/ M ³)

INSTALLED DENSITY (90% RH)	28 LB / FT ³ (449 KG/ M ³)
INSTALLED DENSITY (DRY)	25 – 28 LB / FT ³ (400 –449 KG/ M ³)
SHRINKAGE ^B	0.4%

Specifications are subject to change without notification. Results shown are typical but reflect test procedure used. Actual field performance will depend on the type of tile/stone used, installation methods and site conditions.

A. Compressive Strength per ASTM C 109 (air dry) – test at 28 days, 2" (51 mm) cubes, air dry.

B. Shrinkage per ASTM c 157 – time-series testing performed also using MTEC Tester.

Working Properties

Working Time	60 minutes
Time To Traffic	12 hours
Apply DRYTEK self-leveling cement cap at 1/2" (13 mm)	24 hours

5. INSTALLATION

Preparation of Substrate

- Clean substrate to eliminate dust, dirt, oil, grease, paint or any contaminants which may inhibit bonding. Do not use chemicals to clean substrate. Remove any felt-backed floor coverings.
- Test surface bond strength of substrate . If minimum 72 psi (0.5 MPa) bond strength is not achieved or the substrate is contaminated mechanically clean by shot blasting or scarifying to a CSP of 3–5.
- Test moisture content of concrete substrate per ASTM F 2170. If substrate RH exceeds 95% (or if substrate RH exceeds the level required by the manufacturer of the floor goods or coatings to be applied over DRYTEK) then DRYTEK® MVB Moisture Vapor Barrier prior to installing DRYTEK 3000.
- Inspect for contraction joints, construction joints, and cracks in the substrate which may be subject to movement after installation of DRYTEK 3000. These must be maintained as joints in the new surface.
- Maintain substrate temperature at a minimum 43°F (6°C) during application and air temperature between 50–77°F (10–25°C) during drying. Provide adequate ventilation to ensure uniform drying.

Installation Over Concrete Slabs

- ALL CONCRETE SURFACES MUST BE SHOT BLASTED/MECHANICALLY ABRADED if minimum 72 psi (0.5 MPa) bond strength is not achieved or the substrate is contaminated
- All surfaces must be primed with DRYTEK Multi-Purpose Primer and should be between 40°F (4°C) and 90°F (32°C). Surfaces should be structurally sound, clean and free from all dirt, oil, grease, adhesives, paint, sealers or curing compounds.
- New concrete surfaces must be at least 28 days old.
- Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate.

Follow ANSI specification A108.01-3.7 "requirements for movement joints: pre-arations by other trades" or TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.

Installation Over Wooden Sub-Floors

- Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/480 for stone installations where L=span length.

- Minimum construction for interior plywood floors:

SUBFLOOR: 5/8" (15 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joists spaced 16" (400 mm) o.c. maximum; fasten plywood 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) between sheets and 1/4" (6 mm) between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joists with construction adhesive.

UNDERLAYMENT: 5/8" (15 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) to 1/4" (6 mm) between sheets and 1/4" (6 mm) between sheet edges and any abutting surfaces; offset underlayment joints from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" for complete details.

- Prime cleaned and properly prepared surface with DRYTEK Multi-Purpose Primer as described in "Priming" section.
- Allow primer to dry accordingly. Install 3.2# galvanized diamond metal lath over entire exterior glue plywood floor. Ensure proper fastening to eliminate any loose sections. Do not install over wet primer. Note: galvanized diamond metal lath can be omitted when installing DRYTEK 3000 over LATICRETE® Floor HEAT.
- Install DRYTEK 7200 over floor in accordance with "Application" section below.

When using DRYTEK DM1 Reinforcement Mat:

1. Place DRYTEK DM1 Reinforcement Mat on substrate with the fabric side down/matrix side up.
2. Staple DRYTEK DM1 Reinforcement Mat every 12" to 16" (300 - 400mm) on center.
3. Dilute DRYTEK Multi-Purpose Primer at a 3:1 primer to water ratio and spray apply to DRYTEK DM1 Reinforcement Mat. Allow DRYTEK Multi-Purpose Primer to dry accordingly.
4. Mix and pour the specified DRYTEK self-leveling underlayment at 3/4" (19mm) depth. Refer to DRYTEK DM1 Reinforcement Mat data sheet 050.0 for more information.

Installation Over Cutback Adhesive (over concrete only)

- Mechanical removal of cutback (i.e. grinding, sanding, blasting) can be hazardous, as old cutback adhesive may contain asbestos. Consult adhesive manufacturer and any governmental agencies for proper removal of any adhesive containing asbestos.
- DRYTEK 3000 can be installed over a thin layer of non-water soluble cutback or other non-water-soluble adhesive residue.
- For adhesives that do not contain asbestos remove the non-water soluble cutback adhesive to a thin residue by razor scraping or equivalent and then remove any loose particles by thoroughly sweeping, vacuuming and then wet mopping the substrate.
- Since the weakest link of the system will be the bond of the adhesive to the substrate, it is important that the adhesive be very thin, firm and have a good bond to the substrate. After scraping the non-water soluble cutback down to a thin "transparent" residue, and if the floor then passes the 72 psi (0.5 MPa) pull strength test pour DRYTEK® 3000 without shot blasting. If the floor does not pass the 72 psi (0.5 MPa) pull strength test you must thoroughly shot blast the floor to a CSP of 3–5. It is the responsibility of the installation contractor to ensure the substrate is properly prepared prior to the installation of any DRYTEK® material.
- Water soluble vinyl adhesives must be completely removed (e.g. shot-blasted) from the floor surface.

Installation Over Vinyl, Linoleum, Sheet Vinyl, and DRYTEK MVB Moisture Vapor Barrier (over concrete only)

- All vinyl tile, linoleum, non-cushioned sheet vinyl, and DRYTEK MVB Moisture Vapor Barrier must be well adhered to the substrate and free from any bond breaking or bond inhibiting surface contaminants. Ensure bond strength of the vinyl tile, linoleum, non-cushioned sheet vinyl, and DRYTEK MVB Moisture Vapor Barrier to the substrate is a minimum 72 psi (0.5 MPa). If the floor does not pass the 72 psi (0.5 MPa) pull strength test you must remove the tile and thoroughly shot blast the floor to a CSP of 3–5. It is the responsibility of the installation contractor to ensure the substrate is properly prepared prior to the installation of any DRYTEK material. Cementitious decorative coatings and epoxy resin floor coverings including epoxy terrazzo are excluded from this application. Consult Technical Services prior to any installation over vinyl tile, linoleum, non-cushioned sheet vinyl, and DRYTEK MVB Moisture Vapor Barrier.

Installation Over Existing Ceramic Tile, Stone or Cement Terrazzo

- All tile and stone must be well adhered to the substrate and free from any bond breaking or bond inhibiting surface contaminants. Ensure bond strength of the tile or stone to the substrate is a minimum 72 psi (0.5 MPa). If the floor does not pass the 72 psi (0.5 MPa) pull strength test you must remove the tile or stone and thoroughly shot blast the floor to a CSP of 3–5.
- Mechanically abrade existing ceramic tile and stone with a carborundum disk. Wash and rinse thoroughly with clean

water. Allow to dry. Skim coat existing ceramic tile, cement terrazzo or stone with DRYTEK Premium Skimcoat Patch Underlayment (min. 1/8" [3 mm] thick continuous coating). Allow to dry.

- Prime surface according to "Priming" section and install DRYTEK 3000 according to "Application" section.

Priming

Use DRYTEK Multi-Purpose Primer with every application of DRYTEK self-leveling products. Shake DRYTEK Multi-Purpose Primer thoroughly before using. Pour, mop or spray DRYTEK Multi-Purpose Primer onto the surface and distribute evenly using a bristle broom to ensure complete saturation of the entire surface. Remove any puddles or areas where DRYTEK Multi-Purpose Primer is especially thick. Allow DRYTEK Multi-Purpose Primer to dry to a clear film (usually 3 – 5 hours), but no more than 24 hours prior to application of DRYTEK (specific self-leveling product by name). DRYTEK Multi-Purpose Primer should not be applied when the surface temperature is below 40°F (4°C) or above 90°F (32°C). Insufficient drying time or poor film formation of DRYTEK Multi-Purpose Primer due to low temperature and/or high humidity may result in pinholes in the surfacing layer. Maintain adequate ventilation during and after application of DRYTEK Multi-Purpose Primer to help ensure quicker drying. If DRYTEK Multi-Purpose Primer dries within 45 minutes, substrate is excessively dry and will require another application as directed on DRYTEK Multi-Purpose Primer data sheet (047.0).

For installation of DRYTEK Multi-Purpose Primer over sheet vinyl, linoleum, VCT/VAT, or DRYTEK MVB Moisture Vapor Barrier; apply DRYTEK Multi-Purpose Primer (diluted 1:1 with water) over entire substrate then lightly scatter DRYTEK self-leveling underlayment powder over the wet primer and broom to form a light slurry. Allow slurry to dry prior to applying DRYTEK self-leveling product.

Note: Keep primed surface clean. Do not allow any foot traffic onto primed surface. DRYTEK Multi-Purpose Primer is milky when wet and clear when dry. DRYTEK Multi-Purpose Primer allowed to sit on substrate for more than 24 hours without a DRYTEK self-leveling product being installed must be re-primed.

Mixing

Mix the entire 34 lb (15.5 kg) bag of DRYTEK 3000 into 1.75 gallons (6.6 l) of water. For manual application, add product to water and mix for 2–3 minutes using a heavy duty drill (650 rpm) to obtain a lump-free mix. DRYTEK 3000 can also be used in most pump equipment. Please consult with a DRYTEK representative to verify equipment compatibility.

Application

Perimeter Isolation Strip

It is essential that all walls and building elements are isolated from the self leveling underlayment pours to ensure proper expansion allowance against all restraining surfaces.

Note: It is recommended to install a perimeter isolation strip before the installation of DRYTEK 3000. Attach the perimeter isolation strip to the perimeter wall of the entire subfloor, as well as around the perimeter of any protrusions, in order to isolate the floor and wall/restraining surfaces. Temporarily fasten perimeter isolation strip in place with staples masking, duct, or carpet tape. The perimeter

isolation strip can then be removed after the tiles have set firm. The joints can then be filled with LATICRETE® Latasil™.

Make sure that the substrate, the material itself and the mixing water are at a temperature of at least 40° F (4°C). Pour blended material onto substrate at a minimum depth of 3/4" (19 mm). Immediately smooth the poured slurry with a smoother or bull float. Material can be walked on (light foot traffic) after 12–24 hours. If a delay is anticipated between drying of the DRYTEK 3000 and application of the self-leveling cap, temporarily cover the dried DRYTEK 3000 with plywood or similar load bearing material to protect the surface from damage by foot traffic or other site workers.

Flooring Installation

DRYTEK self-leveling products (e.g. DRYTEK 7200) can be pumped or poured over dried DRYTEK 3000 after 24 hours, depending on site conditions. Prime the surface of the DRYTEK 3000 with DRYTEK Multi-Purpose Primer following instructions. When applying DRYTEK Multi-Purpose Primer to the cured DRYTEK 3000 surface use spray equipment only – do not broom-apply. Follow instructions on bags for proper preparation and application of DRYTEK self-leveling products. In applications where excessive floor deflection is anticipated it is recommended that a heavy duty fiberglass mesh or substrate metal lath be applied over the dried DRYTEK 3000, followed by a 1/2" (13 mm) minimum depth cap (depth is dependent on application requirements) of a DRYTEK self-leveling product. Consult finish flooring manufacturer for the required relative humidity levels which underlayments need to achieve prior to the installation of finishes.

- **CAPPING DELAY:** If installation of the DRYTEK self-leveling cap (e.g. DRYTEK 7400 or DRYTEK 9400) is to be delayed more than 72 hours after the DRYTEK 3000 is installed – allow the DRYTEK 3000 to dry for 24 hours, then loosely cover the surface with plastic sheeting. When ready to install the cap – remove the plastic sheeting, prime the surface with DRYTEK Primer (refer to dilution rate and guidelines from DS047.0), and install the DRYTEK self-leveling cap per product instructions.
- **PROTECT FROM TRAFFIC:** If heavy foot or equipment traffic is expected prior to capping, temporarily cover traffic lanes with plywood or similar load bearing material to protect the DRYTEK 3000 surface from damage. Remove plywood prior to the final capping step.
- **RADIANT HEATING INSTALLATIONS:** DRYTEK 3000 has insulating properties superior to that of standard concrete, and therefore provides an excellent base surface for radiant heating systems. However, because of these insulating properties, do NOT encapsulate radiant heating tubes in DRYTEK 3000. First, pour, smooth, and dry the DRYTEK 3000 per installation instructions. Then lay the electric or hydronic radiant heating system on top of the hardened DRYTEK 3000. Finally, encapsulate the tubes with DRYTEK 7600 per product instructions (DS 043.0).

6. AVAILABILITY AND COST

Availability

For Distributor information, call:

Telephone: +1.203.393.0010

For on-line Distributor information, visit DRYTEK at www.drytek.com.

Cost

Contact a DRYTEK Technical Sales Representative in your area.

7. WARRANTY

See 10. FILING SYSTEM

DS 230.16: DRYTEK 3 Year Product Warranty

8. MAINTENANCE

No maintenance required.

9. TECHNICAL SERVICES

Technical assistance

Information is available by calling the DRYTEK Technical Service Hotline (hours 8:00 AM to 5:30 PM EST):

Telephone: +1.877.DRYTEK1, ext. 247 or;
+1.877. 379.8351, ext. 247

Fax: +1.203.393.1948

Technical and safety literature

To acquire technical and safety literature, please visit our website at www.drytek.com.

10. FILING SYSTEM

Additional product information is available on our website at www.drytek.com. The following is a list of related documents:

DS 230.16: DRYTEK® 3 Year Product Warranty

DS 041.0: DRYTEK 7200

DS 047.0: DRYTEK Multi-Purpose Primer

DS 046.0: DRYTEK Premium Skimcoat Patch
Underlayment

DS 605.0: LATICRETE® Floor HEAT Mat

DS 6200.1: LATICRETE Latasil™

DS 042.0: DRYTEK 7400

DS 045.0: DRYTEK 9400

DS 053.0: DRYTEK MVB Moisture Vapor Barrier

TDS 152: Bonding Ceramic Tile, Stone or Brick Over
Wood Floors

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