

AUSSIE BUILT'S 7 STEP SEALING PROCESS



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Aussie Built Supply is the exclusive U.S. provider of Tech-Dry® sealers, the leading earth building protection products for the construction, maintenance, and remedial repair of earth buildings. Tech-Dry's goal: to preserve the natural integrity and promote longevity of earth buildings and structures.

DUST BINDING INTERNAL AND EXTERNAL WALLS

Step 04:

RENDER OR PATCHING
*OPTIONAL

Step 05:

EXTERIOR SEALER

Step 06

INTERIOR BINDER AND SEALER

Step 07:

MAINTENANCE





Step 01:

PLASTICURE

<u>Tech-Dry® Plasticure</u> is a Rammed Earth builders secret ingredient. We do not build without it. Plasticure will waterproof the wall throughout for its lifetime and helps prevent efflorescence (leaching of salts), mold or mildew staining, and rising damp issues. It will also increase the binding of the mix.

- 1. Using a 1/3 yd rammed earth batch mixer, wet and thoroughly mix all the rammed earth dry ingredients.
- 2. Add minimum 3% cement to batch mixer.
- 3. Stir or mix Plasticure before use.
- 4. Measure out 1 cup of Plasticure and dilute it with 1 gallon of clean water.
- 5. Slowly add or spray the above Plasticure dilution into the mix while blending.
- 6. Blend the mix thoroughly while adding clean water to attain the desired consistency. The mix can now be processed as usual.





*NOTE: Muriatic acid reacts with concrete and can affect the appearance. If surrounding concrete surfaces (i.e. concrete slab) are splashed with overspray, it is recommended that you apply the muriatic acid and ammonia cleaning process to the entire areas BEFORE any specialised concrete treatment is applied for a uniform finish.

Step 02:

CLEAN WALLS

Muriatic Acid + Ammonia Wash - To clean RE Walls from efflorescence (leaching of salts), concrete, water or other construction stains and streaks on your walls, follow the procedure below. *CAUTION: Use protective eyewear and gloves at all times.

Muriatic Acid Dilution - 12oz Muriatic Acid to 1 gallon water (approximately 1:10)

Ammonia Dilution - 8oz Ammonia to 1 gallon water (1:16)

- Use protective eyewear and gloves at all times. Spray
 muriatic acid dilution directly on a wall section using a
 hand pressure sprayer (ie. bug sprayer) or airless spray
 equipment. IMPORTANT: Spray a small section of wall
 only, from top to bottom, so as to not allow the wall to dry
 throughout the cleaning process. Re-spray areas if needed
 to keep it wet.
- 2. Once saturated, scrub the entire wall with a sponge to remove stains. IMPORTANT: Do not allow the wall to dry.
- 3. Spray on ammonia dilution while the wall is still wet. Soak wall with enough ammonia solution in order to neutralize muriatic acid.
- 4. While still wet, spray the wall with a hose from top to bottom. Sponge wall from top to bottom with clean sponge to remove any runs to leave a uniform appearance.





Step 03:

DUST BINDING INTERNAL AND EXTERNAL WALLS

<u>TechDry® Earth Binder</u> will help bind and seal your internal and external walls from dust and residue and enhance the surface texture, finish, and color.

- 1. Apply 1:8 dilution of Earth Binder to interior and exterior cleaned and dry walls. (16oz Earth Binder: 1gal clean water)
- 2. Using a hand pressure spray, soak wall section thoroughly from top to bottom. Apply a second application after the first coat is absorbed by the surface and while the wall is still wet. This is termed a "wet-on-wet" application.
- 3. Avoid any excessive accumulation of the sealer or runs by back rolling the wall with a ½" nap roller to avoid streaking or an uneven finish.

*NOTE: Keep water, sponge and rags ready to wipe up any spillage or overspray of sealers.





*NOTE: A wet sponge wiped over the patch will lighten the appearance and leave a sandier finish, often a preferred finish as the patch point will most likely be darker in appearance. It is recommended you first perform a test patch in a nonconspicuous area. Allow to fully dry and cure before any additional sealers are applied.

Step 04:

RENDER OR PATCHING *OPTIONAL

Patching will inherently not color match the original wall. However, the color difference can be highlighted as an artistic feature of the wall such as a patch to creviced cold joints.

Micks patch/render mix:

- Screen all rock over ¼" from RE mix
- 3 Cups- Dry screened RE mix
- 2 Tbsp- Portland cement
- ½ Cup- Polymeric emulsion (Concrete bonding adhesive from hardware store)
- 2 Tbsp- TechDry Plasticure
- Add water and stir to form consistent slurry

Application:

- 1. Clean patch from any loose material.
- 2. Wet with a sponge or spray with water using a small spray bottle.
- 3. Apply mix while pushing into the patch.
- 4. Scrape off mix flat to wall surface. Cutting motion with spatula or trowel works best.
- 5. Pay careful attention to thoroughly clean and remove any additional slurry from the wall surface with a clean, wet sponge to minimize the patch's appearance. A clean, wet sponge can be carefully used to soften and blend the edges of the patch.





*NOTE: Once Stabilised Earth Water Repellent is applied, it creates a waterproof seal and will not allow other sealers to penetrate the surface. Do not apply to internal walls or the final application of Earth Binder will not penetrate and will leave an undesirable milky appearance.

Step 05:

EXTERIOR SEALER

Tech-Dry® Stabilised Earth Water Repellent W is a clear penetrating water-based silicone water repellent sealer for external rammed earth walls. Although it is not necessary to apply a sealer if Plasticure is used, we recommend that you spray Stabilised Earth Water Repellent W after your exterior walls are built to help protect and seal your clean walls from run marks or construction stains (nail rust and spills etc).

- 1. Apply 1:9 dilution of Stabilised Earth Water Repellent W to **exterior dry walls ONLY**. (14.4oz sealer : 1gal clean water)
- 2. Using a hand pressure spray, soak wall section thoroughly from top to bottom. Apply a second application after the first coat is absorbed by the surface and while the wall is still wet. This is termed a "wet-on-wet" application.
- 3. The number of coats depends on the permeability of the substrate. Two coats (wet-on-wet) are generally recommended. However, for very permeable substrates, more coats may be required. If necessary, allow the sealer to dry before further coats.
- 4. Avoid any excessive accumulation of the sealer or runs by back rolling the wall with a ½" nap roller to avoid streaking or an uneven finish.





Step 06:

INTERIOR BINDER AND SEALER

TechDry® Earth Binder is applied to the interior walls in a 1:4 dilution leaving a dust free, smooth texture and enhanced appearance. Earth Binder has some water resistance, so it is ideal for use in wet areas, such as the kitchen, bathroom or laundry. It should be applied just before or after the roof is installed to reduce weathering of Earth Binder (excluding any areas treated with Stabilised Earth Water Repellent).

- 1. Apply 1:4 dilution of Earth Binder to **interior dry walls**. (32oz Earth Binder : 1gal clean water).
- 2. Using a hand pressure spray, soak wall section thoroughly from top to bottom. Apply a second application after the first coat is absorbed by the surface and while the wall is still wet. This is termed a "wet-on-wet" application.
- 3. Avoid any excessive accumulation of the sealer or runs by back rolling the wall with a ½" nap roller to avoid streaking or an uneven finish.





Step 07:

MAINTENANCE

If Plasticure was not used in the initial RE mix, a maintenance application of Stabilised Earth Water Repellent (1:9 ratio) should be applied to external walls every 3-5 years depending on the degree of surface traffic and climatic conditions.

A maintenance Earth Binder (1:8 ratio) application may also be reapplied to dusty and crumbling walls. This should be done prior to reapplying Stabilised Earth Water Repellent. A small test application is needed to determine penetration of Earth Binder as it may create a milky appearance over previous sealers applied.

Have more questions?

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Our team is here to answer any of your questions regarding products, process, or consulting. Please do not hesitate to contact us. We will be in touch quickly.

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