DryFix RenderPin

Dry mechanical pinning and remedial tying system

APPLICATIONS

- For re-pinning separated, unstable and potentially dangerous loose render, which is typically 20-65mm thick but can vary greatly from 12mm to 80mm
- Suitable where buildings are coated with a hard render, keyed to the back-up material by means of a splatter dash application, which is then painted or covered with small tiles to achieve a waterproof finish

RenderPin being power-driven into pilot hole

Over 100 standard repair specifications are available online, covering all common structural faults.

Relevant Repair Details: RD WT23

FEATURES

- Far simpler and more cost-effective method of stabilising render than traditional solutions such as hacking off and re-rendering or chemical anchoring with large pins
- Usually requires no resin, grout or expansion devices
- Quick, simple, non-disruptive installation using the Power Driver Attachment
- Installed pin can be recessed below face of masonry, or flush with the surface in thinner renders
- Non-obtrusive 'invisible' repair
- Resists wind loads and ground vibrations
- Highly economical with low installed costs
- Effective in most common building materials
- May be installed by abseilers for emergency repairs
- Can be used as part of a re-rendering scheme
- Easily proof tested on site

TECHNICAL SPECIFICATIONS

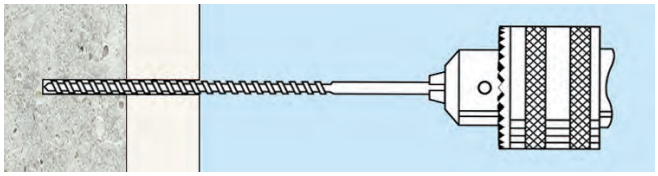
DRYFIX RENDERPIN	
Material	Austenitic stainless steel Grade 304 (1.4301) or 316 (1.4401)
Diameter	8mm
Length	Render thickness + any void + 50mm into back-up material
Standard lengths	70mm, 80mm, 90mm, 100mm and 150mm – in boxes of 100
Diameter of pilot hole	5mm/6.5mm – to be determined by on site testing
Depth of pilot hole	Length of RenderPin + 25mm
Minimum fixing density	Typically 450mm x 450mm in a staggered pattern or at the specified density
Bonding agent	Normally none required (possibly CrackBond with thin render)

RECOMMENDED TOOLING	
For drilling pilot hole	Rotary percussion 3-jaw-chuck drill
For installing RenderPin	Power Driver Attachment fitted to an electric hammer drill (SDS type)

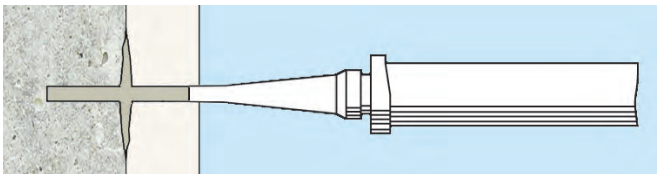
INSTALLATION PROCEDURES

1. Mark the position for the RenderPins on the face of the render.
2. Drill an appropriate diameter pilot hole which must be evaluated, prior to commencement of the works, using a Helifix Load Test Unit. Drill through the near leaf and into the back-up substrate, to the predetermined depth, using an appropriate rotary percussion drill (3-jaw-chuck-type).
3. Fit the DryFix Power Driver Attachment to an electric hammer drill (SDS type).
4. Load the RenderPin into the insertion tool.
5. Power-drive the tie into position until its outer end is recessed below, or flush with, the face of the render by the insertion tool.
6. Make good the entry hole with matching materials.

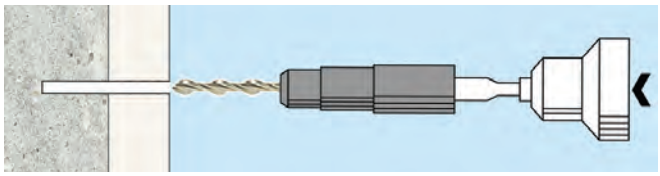
NB Regular testing of the render material must be undertaken to check the pilot hole required and its suitability – especially in renders less than 30mm thick.



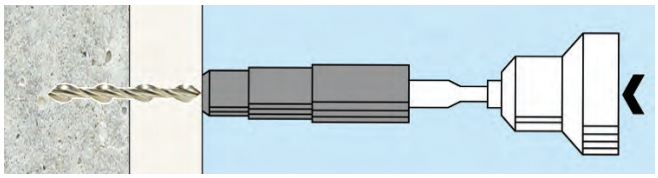
1. Carefully drill a small pilot hole through the render and into the backup material, to a predetermined depth, using a rotary percussion drill (3-jaw-chuck-type).



2. OPTIONAL: For thin render the specification may require CrackBond epoxy to be injected into the render to assist with the bond.



3. Load the RenderPin into the special, insertion tool which is fitted to an electric hammer drill (SDS type).



4. The RenderPin is power driven into position until the outer end of the tie is recessed just below, or flush with, the face of the render by the PDA dependent upon the specification and the PDA setting.

NOTE: Some substrates, such as hard concrete and granite, are not suitable for RenderPin installation, due to the inability of the tie to cut into the material. Appropriately sized pilot holes for the combination of render and base substrates are essential for a successful tie.