

SOVEREIGN ISLE

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Blue Pty Ltd

Exterior wall: Schist from New
Zealand

Product: STAIN-PROOF™

Project Completed: 2009



The Project

After only two years, the unsealed New-Zealand schist stone showed extensive yellow-brown patches of oxidation (rust) and white patches of salt- efflorescence.

Both conditions were caused by water being able to move freely through the material. Water carries dissolved minerals which can be deposited on the surface when the water evaporates. If the stone contains metal oxide deposits (as in this case) the water speeds up oxidization of these deposits, causing the rapid appearance of rust stains. The owners wanted the staining and salt deposits removed, but were also looking for long term protection to help prevent these problems from quickly returning.



Special Requirements

Common penetrating sealers help to prevent water entering from the exposed areas of the wall, but are unable to penetrate such dense stone and create a water-repellent barrier inside the stone. So, water entering the stone from the ground underneath could still travel right through the interior of the wall up to the visible areas.

The only way to help prevent this is to use a treatment which is able to penetrate the stone deeply and create a substantial water repellent barrier.

The Dry-Treat Solution

Dry-Treat's impregnating sealers are technologically different from common impregnators. STAIN-PROOF's specially engineered molecules are hundreds of times smaller and are designed to migrate deep into even very dense stone. The special sealing molecules also bond permanently by chemical reaction to become a permanent part of the molecular structure of the stone. This creates a substantial liquid repellent barrier which keeps water and damaging salts well away from the visible surface of the stone.

STAIN-PROOF™ is also fully breathable, so water which is absorbed from the earth underneath the wall can still evaporate and escape freely as water vapour.

Australia Blue Pty Ltd specialist deep pore cleansing expertise was able to remove the existing staining, after which they applied 2 coats of STAIN-PROOF™. By creating a deep dry barrier, STAIN-PROOF™ will continue to protect against future salt efflorescence, and dramatically slow down oxidization of the metal deposits in the stone. The presence of air (oxygen) will still cause oxidization, but without the presence of water this process will be dramatically slowed, taking many years instead of mere months to occur.

Before



After

