

Solver Paints

Head Office:

560 Churchill Road, Kilburn, South Australia 5084

Telephone: (08) 8368 1200 Facsimile: (08) 8368 1222

www.solverpaints.com.au

Solver Paints is the registered trademark
of WP Crowhurst Pty Ltd A.B.N. 65 007 527 371



Revised Jan 2008

PRODUCT INFORMATION

SS-114

POWER CABLE MARKS ON INTERNAL WALLS

“For many years there have been occasional reports of marks on decorative paint surfaces revealing the position of power cables embedded in the cement render and plaster coat on internal brick walls. The mark sometimes becomes visible within a few months after completion of the building. It may appear only as a sheen on the paint surface or, in some cases, as a distinct discolouration.

Pirelli Cables has taken an interest in this problem on behalf of the industry, even though their cables are no more affected than any other.

Pirelli says it is possible that the softeners, used by all cable manufacturers to make the PVC flexible, influence formation of these marks. Other ingredients, such as anti oxidant, may contribute.

Laboratory models were constructed by Pirelli in which cable was embedded at different depths in cement render and plaster coating. Both water based and oil based sealers were examined on the plaster coat; a flat water based decorative coat was applied overall.

These laboratory models have shown that the conditions which favour development of marks are use of water based sealer coat over cable covered only with 2mm thickness of plaster coat.

Power cables installed in these situations are PVC insulated, PVC sheathed flat constructions complying with Australian Standard AS 3147.

Experience has shown that marking of paint surfaces is not restricted to cable from one source. Analysis of cable from these installations has revealed compliance with the cable manufacturer's specification.

PREVENTATIVE MEASURES:

1. Ensure a good covering of cement render over the cable.
2. Apply an oil based sealer to the plaster coat surface. Paint manufacturers make particular recommendations for this purpose. *

* **SOLVER NOTE: SOLVER Line 4129 Wall-Sealer White**

Originally published in the South Australian Builder, January/February 1991. Reprinted with permission from Master Builders Association of S.A. Inc.

NOTE: In the original laboratory work carried out by Pirelli Cables, SOLVER Line 4129 Wall-Sealer was the Sealer used to carry out the evaluation. However, further tests have been carried out by SOLVER Technical staff on actual wall surfaces affected by the plasticiser from power cables. These tests have shown that, in the most severe cases, 2 coats of SOLVER Line 4832 Polysol Interior Satin Clear followed by 1 coat of SOLVER Line 4103 All Purpose Undercoat (with one day drying time between coats) is more effective than SOLVER Line 4129 Wall-Sealer. This system must then be left for at least one day before repainting the whole wall surface with the required SOLVER wall finish.

CHANGES SINCE LAST ISSUE:

"This information is based on data believed by WP Crowhurst Pty Ltd to be accurate at the time of writing but is subject to change without notice. It is given in good faith, for the assistance of users and is of a general nature. No legal warranty expressed or implied is made as to its accuracy, completeness or otherwise. Every person dealing with the materials referred to herein does so at their own risk absolutely and must make independent determinations of suitability and completeness from all sources to ensure their proper use. We have no control over the conditions under which these products are stored, handled or used and therefore our recommendations must not be regarded as amounting to legal warranty or as involving any liability on us". ©

AUSTRALIAN MADE



AUSTRALIAN OWNED

Research Laboratory Accredited by the National Association of Testing Authorities Australia Reg. Lab No. 931

