CI/SfB
(43) Y

MARCH 2018
(SUPERSEDES APRIL 2005)
PRODUCT DATA SHEET

ARDEX PSRS

Penetrating Screed Renovation System

Features

- Consolidate weak or damaged screeds to meet BS 8204 Soundness Category A
- Rapid installation reduces overall construction times, and minimises disruption to occupants
- Can be used on heated cement/sand screeds
- Solvent free
- Low odour

bsi
ISO 9001 Quality Management Systems CERTIFIED
ISO 14001 Environmental Management CERTIFIED
ISO 45001 Occupational Health and Safety Management CERTIFIED
Reg No. FM 01207 EMS 565427 OHS 628374

ARDEX UK LIMITED
Homefield Road, Haverhill, Suffolk CB9 8QP UK.
Telephone: +44 (0)1440 714939
Fax: +44 (0)1440 716640
Email: technical_admin@ardex.co.uk
ARDEX online: www.ardex.co.uk

ARDEX PSRS

Penetrating Screed Renovation System

DESCRIPTION

ARDEX PSRS is an ultra-low viscosity, solvent free, two component, epoxy resin; designed for strengthening and restoring poorly compacted and low strength screeds that do not meet the required in-situ crushing resistance value when tested. ARDEX PSRS penetrates into the defective screed, filling voids resulting from poor compaction and consolidating loose particles. The cured resin filled substrate will provide a high strength screed that meets the highest soundness category given in BS 8204-1 for in-situ crushing resistance.

It is most useful in biologically sensitive areas where the removal of the screed will impact on the surrounding environment.

SUBSTRATE PREPARATION

Any floorcoverings should be removed along with any smoothing/levelling underlayment to expose the underlying cement/sand screed. Depending on the weakness of the screed choose suitable mechanised equipment such as a scabbling/planing machine followed by surface grinding, which should leave the open-textured weak screed fully exposed.

Thorough vacuuming of the surface is essential to remove dust, which will impair the penetration of ARDEX PSRS.

Should any full depth repairs be required, consult the ARDEX A 38 or ARDEX A 38 MIX datasheets for further information.

As with all epoxy systems, the viscosity of ARDEX PSRS will increase at lower temperatures, resulting in reduced screed penetration and impaired performance. To maximise performance and screed penetration, the subfloor should ideally be above 15°C. Do not use at temperatures below 10°C. Similarly the ARDEX PSRS resin packs should be conditioned at 15-25°C for 24 hours prior to use.

NOTE: ARDEX PSRS will not penetrate a screed saturated with water. If the screed is saturated, consult the ARDEX Technical Services Department for further advice. If there is not a functioning DPM beneath the screed and/or the screed is damp, check that the screed will be stable if kept under damp conditions. Rapid drying and gypsum based screeds are generally not stable in the long term, under wet conditions. If the screed is damp and is a cement/sand screed then ARDEX DPM 1 C may be applied following consolidation by the ARDEX PSRS system. In this situation an un-sanded, cured ARDEX PSRS can be abraded to remove any surface contaminates, then thoroughly cleaned before applying ARDEX DPM 1 C directly. Consult the ARDEX DPM 1 C datasheet for further guidance. For heated screeds, the heating must be switched off for 48 hours before and after the application of ARDEX PSRS.

NOTE: do not fill movement joints with the resin, use a suitable impervious joint filler designed for the application.

MIXING

The resin and hardening agents are pre-gauged in their original containers to the correct mixing ratio (2.52:1).

The hardening agent (Component B), is added to the resin (Component A), and should be thoroughly mixed together with a spiral mixing paddle and a slow speed drill until a uniform consistency is achieved. It is important that all the components have been mixed. A proportion of the mixed product should be poured back in to the Component B can and stirred to ensure that:

1. Any hardener left in the can is amalgamated in the mix.
2. The resin is introduced into the can of hardener to ensure that any product left in the can will cure and can be disposed of as an inert chemical system.

The proportion placed in can B should then be returned to the original mix and stirred again.

APPLICATION

Immediately after mixing, ARDEX PSRS should be poured over the prepared screed and spread over the surface using a squeegee, moving the material constantly to facilitate even penetration of the screed. Continue applying ARDEX PSRS until no further resin is absorbed. Finally, scatter ARDEX FINE AGGREGATE over the surface to provide a "sandpaper" finish as a mechanical key for an application of the appropriate ARDEX smoothing compound, and allow to cure. Alternatively, once the ARDEX PSRS has cured for at least 4 hours abrade and thoroughly clean the surface before applying one coat of ARDEX R 3 E Epoxy Primer and sand blinding. ARDEX PSRS has a working time of 20 minutes at 20°C. This is reduced at higher temperatures and extended at lower temperatures.

Excessively high temperatures, e.g. above 25°C, will significantly reduce the working time of the resin and should be avoided. It is recommended that the ARDEX PSRS is poured out and spread immediately after mixing as the reaction is exothermic, and the heat generated in the container will reduce the working time.

NOTE: To ensure the screed has obtained the correct category required, testing can be carried out after 24 hours by using an ISCR tester.

COVERAGE

The coverage achieved with ARDEX PSRS will depend upon the porosity and depth of the screed. Typically a 50mm thick weak cement/sand screed with a BS 8204-1 in-situ crushing resistance test value of 8mm will require between 3kg and 5kg of ARDEX PSRS per square metre.

NOTE: Stronger/denser or more thoroughly compacted areas of the same screed will require less resin.

FINISHING/SMOOTHING

Once the ARDEX PSRS resin has cured, typically 4 hours at 20°C, and excess loose sand has been removed, the sand blinded surface can be smoothed using any of the ARDEX Levelling Compounds which should be selected with the final floor finish in mind. Please see the relevant ARDEX datasheets for further information.

PACKAGING

10kg units of ARDEX PSRS are supplied in pre-gauged metal duo containers. The hardening agent (Component B) is in the small container and the resin (Component A) is in the larger container, with additional room to mix in the hardener (Component B).

STORAGE AND SHELF LIFE

Store in dry conditions. ARDEX PSRS has a storage life of up to 12 months when stored above 10°C in the original unopened containers.

TECHNICAL DATA

Mixing ratio	2.52:1
Density	1.08kg (mixed)
Pot life	approximately 10 minutes
Working time	approximately 20 minutes
Over coating	4-24 hours
Walkability at 20°C	after approximately 4 hours

NOTE: For the latest technical and health and safety information on this product, consult the current technical or health and safety data sheet online at **www.ardex.co.uk**

TECHNICAL ADVICE HELPLINE
01440 714939
ARDEX online: www.ardex.co.uk