

A P P L I E D

concrete
SOLUTIONS

ACS TRADITIONAL FLOOR SCREED

NEW AGE TECHNOLOGY SCREED

CONSTANT PERFORMANCE

DESCRIPTION

ACS Screed is a pre-blended screed mixture for the installation of cementitious screeds and beds.

ACS Screed is a grey powder, consisting of specially graded sand, cement and additives, specifically formulated to create easy to use and apply cementitious screeds suitable for the installation of tiles, vinyl and carpet.

ACS Screed is suitable for internal and external floor applications, including balconies, bathroom floors and shower bases, in both bonded and un-bonded screed applications.

FEATURES AND BENEFITS

- A single component system
- Requires only the addition of clean water
- Quick and easy to apply
- Eliminates the need to carry sand and cement
- Suitable for thin and thick bed applications
- Can be further improved by mixing with ACS NeoLastic (diluted 1:1 with water)

RECOMMENDATIONS

Do not use:

- On wooden, rubber, or metal substrates, unless the minimum bed thickness is 40mm and is reinforced with an appropriate wire mesh.
- Contact ACS Technical Services for information on tiling over other surfaces not mentioned in this technical data sheet.

PACKAGING

ACS Screed is available in 20kg paper bags.

CONSUMPTION

Approximately 2kg per m² per mm of adhesive thickness. 20kg of ACS Screed will cover approximately 1m² at a thickness of 10mm.

For guidance, the table below provides estimated coverage for ACS Screed and NeoLastic for various applications.

Surface types and application variations may cause departures from these consumption estimates.

Application	Application Details	Cover Estimate (smooth surface) m ² /litre (mix)	Cover Estimate (rough surface) m ² /litre (mix)	Litres NeoLastic needed (mix)
Cement Slurry Bond Coat	1:1 (v/v) NeoLastic/Water mixture, 2 litres of mixture added to 4kg cement	(4)	(2)	(1)
Priming	Neat (direct from container)	4	2	1
Priming	1:1 (v/v) NeoLastic/water mixture	16	8	0.5
Priming	1:2 (v/v) NeoLastic/water mixture	24	12	0.33
Screed Admixture	1.8-2.1 litres of 1:1 (v/v) NeoLastic/water mixture added to 20kg screed, 10mm screed layer thickness	(1:1)	(1:1)	(1)

TECHNICAL PROPERTIES

Dry Product	
Form	Grey Powder
Bulk Density	1900kg/m ³
Mix Ratio	1.8-2.1 litres per 20kg

Compressive Strength	
24 hours	12MPa
7 days	26MPa
28 days	29MPa

Mixed Product	
Consistency	Homogeneous Paste
Wet Density	2000kg/m ³
pH Value	10-12
Pot Life	2 hours
Setting Time	2-4 hours
Drying Time	24 hours

APPLICATION

Substrate Preparation

All substrates must be dry, solid, structurally sound, free of loose particles, paint, grease, oil, wax, dust and any contamination.

Cementitious substrates, such as concrete, must not be subject to shrinkage after the installation of ACS Screed.

AS3958.1-2007 (CeramicTiles-Part 1: Guide to the installation of ceramic tiles) gives guidance on the types of concrete surface finish applicable to various tile fixing methods. It also provides guidance on the waiting period required for new concrete. Table 4.3 from AS3958.1 is shown below.

CONCRETE FLOOR PREPARATION

TABLE 4.3 ex AS3958.1-2007 (CeramicTiles-Part 1: Guide to the installation of ceramic tiles)

Fixing Method		Applicability of Finish				Minimum Drying time of Concrete	Maximum Variation in Plane of Concrete
Fixative	System	Screed	Wood Float or Broom	Power Float	Steel Trowel		
Mortar	In Situ Underlay	Yes	Yes	Yes	Yes	4 weeks	5mm in 3m
	Separating Layer	Yes	Yes	Yes	Yes	4 weeks	5mm in 3m
	Sand/Cement Mortar Bed	Yes	Yes	No	No	6 weeks	20mm in 3m
Adhesive	Thick Bed	Yes	Yes	Yes	No	6 weeks	10mm in 3m
	Thin Bed	Yes	Yes	Yes	No	6 weeks	5mm in 3m
	In Situ Underlay	Yes	Yes	Yes	No	4 weeks	5mm in 3m

Use of ACS Screed and Neolastic Admixture on new concrete surfaces should be governed by the criteria shown in Table 4.3 from AS3958.1-2007.

Fibre cement sheet substrates must be fixed in accordance to the manufacturers instructions and the relevant Australian Standards.

If placing ACS Screed directly onto concrete floors, prime with ACS NeoLastic diluted 2:1. Highly absorbent substrates should be primed with ACS NeoLastic diluted 1:1.

Mixing

Machine Mixing: Place the ACS Screed into the mixer, then add 2 litres of clean water per 20kg bag of ACS Screed. Mix thoroughly for 3 - 5 minutes.

Drill Mixing: Place 2 litres of clean water into a clean container and slowly add 20kg of ACS Screed while slowly mixing with a low speed mixer. Mix thoroughly to a smooth, homogeneous consistency.

Hand Mixing: Place the ACS Screed into a wheelbarrow or onto a clean solid surface, then add 2 litres of clean water per 20kg bag of ACS Screed. Mix with a shovel until a uniform consistency is achieved.

Applying the Screed

Place the mixed product onto the area to be screeded and screed to the desired thickness and plane using an appropriate straight-edge.

Apply the desired surface finish using a wooded or polyurethane float.

Bonded Screeds: Apply a primer coat of ACS Neolastic mixed 1:1 with water on to the substrate. Place the mixed ACS Screed onto the bond coat while it is still wet. Apply the finish as described previously.

Note: ACS Screed should be carefully applied at a minimum thickness of 25mm per application for bonded screeds.

Un-bonded Screeds: Apply the mixed ACS Screed onto a polyethylene film, building paper, waterproofing membrane etc. and finish as described previously. The minimum bed thickness should be 40mm.

For external applications, areas subject to vehicular traffic or point loads, mix ACS Screed with ACS Neolastic diluted 1:1 with water.

Discard any material that has exceeded the pot life or working time of the product.

INSTALLING TILES, VINYL AND CARPET

Ceramic Tiles may be installed immediately using the Wet-bed Method or generally with an appropriate tile adhesive when ACS Screed has fully cured, (usually after 7 days). In determining when laid ACS screed is suitable for the installation of different flooring materials, the following guidance is presented based on Australian Standards.

AS2455.1:2007 Textile Floor Coverings – Installation and Practice (Covers products like carpets)

AS1884:2012 Floor Coverings Resilient Sheet and Tile – Installation Practices (Covers products like lino, vinyl)

AS3958.1 : 2007 Ceramic Tiles Part1-Guide to the Installation of Ceramic Tiles

Textile Floor Coverings

ACS screed when tested in accordance with the hygrometer test per Appendix B2.2 in AS2455.1: 2007, the screed shall exhibit a relative humidity not greater than 70%.

Resilient Floor Coverings

ACS screed when tested in accordance with test method A3.1.2 “Relative humidity insitu probe test” per ASTM F2170 in AS1884:2012 shall exhibit a relative humidity not exceeding 75%.

ACS screed when tested in accordance with test method A3.1.3 “Relative humidity surface mounted insulated hood test” per ASTM F2420 in AS1884:2012 shall exhibit a relative humidity not exceeding 70%.

Ceramic Tiles

ACS screed when tested in accordance with test method B5 “Electrical Resistance Test” in AS3958.1: 2007 shall exhibit a moisture content of no greater than 5.5%.

Appendix A8 of AS3958.1:2007 cites that sand cement screeds such as ACS screed when cured for 7 days and allowed to dry for 14 days can achieve suitable moisture contents per method B5. However determination of suitable dryness should be based upon the Electrical Resistance Test.

MOVEMENT JOINTS

It is essential that movement joints are carried through the tile, the adhesive and the screed and are kept free from dust, adhesive and other contaminants.

Refer to AS 3958.1 - 2007 for guidance on design and construction of movement joints.

CLEAN UP

Clean all tools and equipment with water before the adhesive dries.

OPEN TO TRAFFIC

Floors are ready to receive light foot traffic after approximately 24 hours and may be put into full use after approximately 7 days.

STORAGE

Stored in original, unopened packaging, in cool, dry conditions, ACS Screed will keep for 6 - 12 months.

Storing in areas of high humidity or excess moisture may affect the contents and shorten shelf-life.

HEALTH AND SAFETY

During use, avoid inhalation of dust and contact with the skin and eyes. Wear suitable clothing, gloves, eye protection and respiratory protective equipment.

If contact with the skin occurs, thoroughly clean the area with plenty of fresh water and soap. In case of contact with the eyes rinse with plenty of fresh water and seek medical advice.

If swallowed, seek medical attention immediately - do not induce vomiting.

For further information consult the Safety Data Sheet (SDS) and read the product label carefully before use.

SDS documents are available by phoning 1800 077 744.



CONSTANT PERFORMANCE

For further information consult the Material Safety Data Sheet and read the product label carefully before use. Material Safety Data Sheets are available by phoning 1800 077 744.

PLEASE NOTE

The information given in this data sheet is based on our current knowledge of the product when properly stored, handled and applied. We cannot guarantee that the product will be suitable, effective or safe when used for any purpose other than its stated uses.

To the extent that it is lawful, we exclude warranties implied by law and limit our liability to the cost of replacing the product. We accept no responsibility for loss or injury caused by improper use, incompetent preparation, inexperienced or negligent application, or ordinary wear and tear.

Service or advice given by our staff should not amount to responsibility for the project - since the owner, or their contractor (and not River Sands), is responsible for procedures relating to the application of the product.

APPLIED CONCRETE SOLUTIONS
A Division of River Sands Pty Ltd

Corner Riverland and Monte-Khoury Drive,
Loganholme QLD 4129, Australia

Brisbane: (07) 3412 8111
Sydney: (02) 9677 1056
Melbourne: (03) 9311 9225
Perth: 0423 023 164

Toll Free Helpline: 1800 077 744
www.appliedconcretesolutions.com.au