

Econo Rapid

DESCRIPTION

Econo Rapid is a single component, fast setting cement based adhesive for ceramic tiles, porcelain, slate, pavers, natural stone and specific moisture sensitive materials.

Econo Rapid is a grey powder, consisting of graded sand, cement, synthetic resins and additives, specially formulated for the repair or renovation of heavily trafficked areas, where the surfaces must be put back into service rapidly, such as walkways or shopping centre floors.

Econo Rapid is suitable for internal and external, wall and floor applications, including bathrooms, kitchens, garages and driveways.

CLASSIFICATION IN ACCORDANCE TO AS4992.1-2006

Econo Rapid is a fast setting, normal cement based adhesive with extended open time, classified as **C1FE**.

FEATURES AND BENEFITS

- One component system, requires only the addition of clean water.
- Fast setting, areas can be put back into service in a short amount of time.
- Extended open time.
- Quick and easy to apply.
- Excellent adhesion to floor and rigid wall substrates.
- Suitable for thin and thick bed applications.
- Suitable for heavy traffic load areas.

RECOMMENDATIONS

Do **not** use:

- On wooden, PVC, rubber, linoleum, metal or painted substrates.

- For tiling on existing tiles, unless it is mixed with *ACS NeoLastic* or *ACS NeoLastic* diluted 1:1 with water.
- For tiling in continuous water immersion applications, such as swimming pools, fountains etc., unless it is mixed with *ACS NeoLastic* or *ACS NeoLastic* diluted 1:1 with water.
- Contact ACS Technical Services for information on tiling over other surfaces not mentioned in this data sheet.

APPLICATION

Substrate Preparation

All substrates must be dry, flat, solid, structurally sound, free of loose particles, paint, grease, oil, wax, dust and any contamination which may inhibit or prevent adhesion.

Cementitious substrates, such as concrete, screeds and renders must not be subject to shrinkage after the installation of tiles. Therefore, they must be fully cured in accordance with the provisions of AS3958.1-2007 and it is essential that they are free of laitance and release agents. Steel trowelled concrete should be mechanically abraded to provide a key.

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

Highly absorbent substrates should be primed with *ACS NeoLastic diluted 2:1 with water*.

Substrates which have become hot due to exposure to sunlight may be cooled down with water.

Masonry substrates should be prepared with a cementitious render to ensure a smooth, sound substrate is achieved.

Mixing

Pour approximately 5.0 – 5.6 litres of clean, cold water into a clean container and slowly add 20 kg of *Econo Rapid* while slowly mixing with a low speed mixer. Mix thoroughly to a smooth, homogeneous consistency. Allow the mix to stand for approximately five minutes and then stir again briefly. The adhesive is now ready for use.

Mixed this way, the adhesive has a pot life of approximately two hours.

Note: The characteristics of *Econo Rapid* can be improved by mixing it with *NeoLastic* or *NeoLastic* diluted 1:1 with water. The characteristics improve in order to exceed the requirements of C2FS2 and C2FS1 respectively.

Use approximately 6.2 – 7.0 litres of *NeoLastic* per 20 kg of *Econo Rapid* or approximately 5.6 – 6.2 litres of *ACLastic* diluted 1:1 with water per 20 kg of *Econo Rapid*.

Applying the Adhesive

Apply *Econo Rapid* onto the substrate using a notched trowel. Choose a notched trowel of an appropriate size to achieve a coverage as recommended by AS 3958.1 – 2007 or better.

To maximize adhesion, spread a thin layer of the adhesive onto the substrate. Immediately thereafter, build up the required thickness using the notched side of the trowel.

For external applications, areas subject to vehicular traffic or point loads, also spread the adhesive onto the back of the tile (back-butter) in order to achieve full coverage and to eliminate any voids under the tiles.

Do not spread more adhesive than can be covered with tiles within the adhesive's open time. Where possible, spread adhesive so as to leave horizontal ribs on walls and unidirectional ribs on floors.

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

Installing the Tiles

Press tiles firmly into freshly notched adhesive within the open time and move the tile at least the width of a rib perpendicular to the adhesive ribs. Adjust tiles as necessary within 30 minutes of installation.

The open time of *Econo Rapid* is approximately 30 minutes under normal temperature and humidity conditions. Unfavourable conditions, such as high temperature, wind, sunlight or highly absorbent substrates may drastically shorten this time, sometimes to as little as a few minutes. It is therefore necessary to repeatedly check whether a skin has formed on the adhesive. If a skin has formed the adhesive should be discarded.

Tiling installed with *Econo Rapid* must not be subjected to rain or washout for at least four hours after installation, and should be protected from direct sunlight for 36 hours. Remove any adhesive from the face of tiles with a damp cloth while the adhesive is still fresh.

Movement Joints

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

Refer to AS3958.1 - 2007 for guidance on design and construction of movement joints.

CLEAN UP

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

GROUTING

Allow 3-4 hours drying time before grouting with an appropriate ACS Coloured Grout.

OPENING TO TRAFFIC

Floors are ready to receive light foot traffic after approx. 3-4 hours and may be put into full use after approximately 24 hours.

CONSUMPTION

Approximately 1.3 kg per m² per mm of adhesive thickness.

A 20 kg bag should cover 5-6 m² depending on the size of the notched trowel and evenness of the substrate.

PACKAGING

Econo Rapid is available in 20kg paper bags.

STORAGE

Stored in original, unopened packaging, in cool dry conditions, *ACS Econo Rapid* will keep for 6 -12 months. Storing in areas of high humidity or excess moisture may affect the contents and shorten shelf-life.

TECHNICAL DATA

DRY PRODUCT	
Form:	grey powder
Bulk Density:	1500 kg/m ³
Mixing ratio/20kg bag	5.0-5.6 litres

The following typical results were obtained at 23 ±2 °C with 50% R. H.

MIXED PRODUCT	
Consistency:	Homogeneous Paste
Wet Density:	1650 kg/m ³
pH:	10 – 12
Pot life:	5 hours
Open Time :	20 minutes
Setting time:	2 hours
Drying Time:	12 hours

TENSILE ADHESION STRENGTHS	
28 days	> 0.5 N/mm ²
24 hours	> 0.5 N/mm ²
Water Immersion	> 0.5 N/mm ²
Heat Ageing	> 0.5 N/mm ²
Freeze / Thaw	> 0.5 N/mm ²
10 min open time	> 0.5 N/mm ²
20 min open time	> 0.5 N/mm ²

HANDLING

Use only in well ventilated areas. Wear protective clothing to minimise skin contact. The use of P1 Masks, tight fitting goggles and barrier creams is recommended.

SAFETY

Econo Rapid contains cement, which can be irritating to the skin and eyes. 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 *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.



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