CONSTRUCTION CHEMICALS FLOOR TILE ADHESIVES

THE COMPLETE RANGE OF FLOOR TILE ADHESIVES FOR CERAMICS, NATURAL STONE, PORCELANE TILES.

Description

(Our base product for all our powder based floor and wall adhesive is FORMULA 1 RAPID SET. A tried and tested floor adhesive for rapid tiling and a superior water proof formulation.)

FORMULA 1 RAPID SET TILE ADHESIVE. (Grey)
Cement based, rapid setting thin or thick bed adhesive for floor and wall tiles. Used to bond ceramic, quarry tiles, mosaics, stone cladding and brick slips. FORMULA 1 RAPID SET will take foot traffic after 2 hours and can be grouted 3 hours after fixing. Where flexibility is required Construction Chemicals SBR bonding agent should be used as part of the gauging water. If SBR polymer is used setting times will increase. Grey only. Can be used internally or externally. SIZE 20kg

FORMULA 1 RAPID FLEXIBLE TILE ADHESIVE. (Grey)
A cement base floor and wall tile adhesive polymer modified to give improved adhesion and flexibility used for fixing vitrified tiles and other tiles with low porosity such as porcelain and glass mosaics. It is suitable for use internally and externally as well as swimming pools. It adheres to most stable backgrounds including concrete, cement renders, brickwork, block work, plaster and plasterboard and existing tile surfaces. It has a 3 hour setting time after which grouting can take place. SIZE 20kg

FORMULA 1 FLEXIBLE UFH. (Under Floor Heating & Timber Grey & White )
A cement based adhesive formulated for use where under floor heating has been installed or when tiling onto timber substrates, this formulation allows for greater flexibility in difficult situations. The adhesive's unique qualities make it ideal for fixing natural stone, ceramic, porcelain, mosaic and glass tiles to most common building substrates including concrete and render, screeds, brick and block work, heated sub-floors , existing tiled surfaces and over boarded wooden floors. FORMULA 1 FLEXIBLE UFH AND TIMBER is perfect for interior, exterior, wet and dry conditions, making it ideal for communal showers and swimming pools. It will take light foot traffic within 2 to 3 hours dependant upon temperature and substrate. grouting should take place after 12 hours. SIZE 20kg

FORMULA 1 SUPER FLEX RAPID. (UFH & TIMBER)
Cement based, rapid setting thin or thick bed adhesive for floor and wall tiles. For use in extreme tiling situations or where high vibration may be a problem. Formulated with a high percentage of polymer with flexibility in mind. Use to bond ceramic, quarry tiles, mosaics, stone cladding and brick slips. FORMULA 1 SUPER FLEX RAPID will take foot traffic after 3 hours and can be grouted 3 hours after fixing. Where extra flexibility is required for under floor heating use Formula 1 Super Flex Rapid. SIZE 20kg.

STANDARD TILE ADHESIVE. (Grey & White)
A cement-based standard setting tile adhesive for fixing limestone tiles, ceramic and quarry tiles, mosaics, brick slips, natural and artificial stone and wall tiles. It is suitable for use internally and externally as well as swimming pools. May be walked on and grouted after 24hrs. SIZE 20kg

Tiling with confidence with Construction Chemicals Formula 1 range of tile adhesives

Wet rooms and swimming pools
Tiling Preparation.

The surface being adhered to must be clean, firm, dry, free of dust, dirt oil and grease and be strong enough to support the weight of adhesives and tiles being fixed. When tiling onto timber flooring ensure that the boards are dry (i.e. conditioned to the environment in which they will be used), rigidly fixed, ventilated beneath and free from barriers to adhesion. All plywood and flooring grade chipboard should have their backs and edges sealed to prevent ingress of moisture and atmospheric humidity, the face to be tiled should be sealed with Construction Chemicals SBR bonding agent and left to dry prior to fixing. These boards should be 18mm thick and screwed or ring nailed down to the joists at 300mm centres or less. In all cases the timber surface to be tiled should be adequately stable, strong and suitably rigid enough to withstand the imposing loads with out deflection. Extra noggins may be required between the joists to stiffen the floor as advised in BS5385-3:1989 clause 14.4.

Concrete

New concrete surfaces should be allowed to dry for a minimum of at least 6 weeks prior to the commencement of tiling. All contaminants such as release agents, latience, dirt should be thoroughly removed by wire brushing using a water based detergent. Rinse thoroughly and allow to dry prior to commencement of tiling. Old concrete must be thoroughly dry brushed to remove dust and loose debris and if required wash and dry before tiling.

Cement/Sand Screeds

New cement/sand screeds should be allowed to dry out by exposure to air for a minimum of at least 3 weeks before commencement of tiling. All surface contaminants should be removed from new and old screed by dry brushing and washing with a water based detergent, as above.

All loose or hollow sounding portions of old screed may be cut out and made good with Construction chemicals self levelling compound.

Mastic Asphalt

Ensure that the surface of the asphalt is sound and in good condition and is a suitable grade for tiling; ie flooring grade. Dirt, grease etc may be removed from the surface with a water based detergent followed by thoroughly washing with clean water. Allow to dry before tiling. Prime the surface with SBR/WATER at 2:1 add OPC and apply to the mastic asphalt prior to tiling.

Existing Glazed and Unglazed Floor Tiles

Ensure that all existing floor tiles are sound and well bonded to the base. Any loose or hollow sounding floor tiles should be removed and made good with levelling compound. For glazed ceramic floor tiles, abrade the existing tiles to provide a surface key.

Vinyl Floor Tiles

Ensure the floor tiles are firmly adhered to the base. Any loose or damaged floor tiles should be removed along with all soft vinyl adhesive residues and the gaps made good.

NB Cushion type flooring is not suitable to receive tiling and should be completely removed, along with any adhesive residues.

Plywood Overlay

The existing timber floor must be dry and securely fixed to floor joists to ensure the floor is free from deflection. Ensure the floor is adequately ventilated below. Cover the existing floor with a 15-18mm WPB or marine grade plywood, screwed down at approximately 300mm centres maximum over the whole area. The screw heads should be flush with the surface (countersunk screws).

Tile Adhesive Mixing

All Construction Chemicals F1 tile adhesive powder should be added slowly to clean water and mixed thoroughly to give a slump free easily worked adhesive. The mix proportions by volume are approximately 3 powder to 1 part water (20kg bag of powder requires approximately 4.5 litres of water). This may vary depending on whether the surface is horizontal or vertical.
Application

Apply the adhesive to a bed thickness of 3mm-6mm to the prepared surface with a suitably sized notched trowel leaving solid ribs. When tiling floors, external situations and wet areas such as showers or swimming pools, solid bed fixing must be achieved. To achieve this the tiles should be “buttered” immediately prior to placing into a ribbed bed, removing any voids. Bed the tiles in firmly with a slight twisting action and make adjustments within 15 minutes of fixing. Leave adequate space between the tiles for grouting approximately 1mm-3mm for wall and 2-20mm for floors) cleaning off excess adhesive from the tile face & grout lines with a damp cloth before it sets. When fixing to timber, floor tiles should not bridge joints between the sheets and boards as recommended in BS5385: Partl:195 clause 14.4. Tools should be thoroughly cleaned in water to remove excess materials immediately after use.

Please Note: All tiling should follow the correct British/European standard, and incorporate movement joints as specified therein.

Technical Information

Packaging: 20kg bags (Grey & White)
Standard Conformity: Exceeds BS 5980: 1980 Type 1 Class AA.
Bed Thickness & Coverage: At 3mm bed thickness your will require 4.5kg material per m2 (Bmm=9kg material m2).
Open Time: 20 minutes depending on temperature and substrate.
Set Time: 3 Hours depending on temperature and substrate for Rapid Set or 12-24 hours standard set.
Storage: Store above 5°C and below 30°C. Protect from frost.
Shelf Life: 6 months in above conditions.

DO NOT APPLY BELOW 5 ° C.
MATERIAL HEALTH & SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCES/PREPARATION AND OF THE COMPANY/UNDERTAKING
   Product Name: Cement based products
   Company: Construction Chemicals (UK) Ltd
   Address: Units 1 & 2a Lazarus Court, Woodgate, Rothley, Leics LE7 7NR
   Telephone: 0116-2301955 Fax: 0116-2301944

2. COMPOSITION/INFORMATION ON INGREDIENTS
   EEC-Symbol Xi. R Phrases 36/37/38/41.

3. HAZARDS IDENTIFICATION
   Irritating to eyes, respiratory system and skin. Risk of serious damage to eyes.

4. FIRST AID MEASURES
   Eye contact: Rinse immediately with water for at least 15 minutes. Get medical attention.
   Skin contact: Wash with soap and water.
   Inhalation: Move into fresh air.
   Ingestion: Wash mouth with plenty of water. DO NOT induce vomiting. In case of spontaneous vomiting ensure vomit can drain freely to avoid suffocation. Get medical attention.

5. FIRE FIGHTING MEASURES
   Suitable extinguishing media: None required as not flammable.

6. ACCIDENTAL RELEASE MEASURES
   Personal precautions: Wear suitable protective clothing and eye/face protection.
   Environmental precautions: Prevent contamination of soil, drains and surface water.

7. HANDLING AND STORAGE
   Handling: Ensure adequate ventilation. Do not breathe dust. Avoid eye contact.
   Storage: Keep in original container. Keep dry.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
   Engineering protective measures: No special measures required.
   Occupational exposure limits: Amorphous Silica 8 hour. TWA – Total Inhalation Dust.
                                 OES 6.0mg/m³. Respirable Dust – OES 2.4mg/m³.
   Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.
   Hand protection: Wear suitable gloves (eg PVC).
   Eye protection: Wear suitable safety glasses to BS2092.
   Skin protection: Wear overalls and closed footwear.

9. PHYSICAL AND CHEMICAL PROPERTIES
   Melting point/range: Not Applicable
   Boiling point/range: N/A
   Oxidising properties: N/A
   Auto-flammability: N/A
   Solubility in water: Forms alkaline mixture
   Vapour pressure: N/A
   Partition Coefficient: N/A
   Explosive properties: N/A
   Appearance: Grey granular powder
   Odour: Slight
   Density: Bulk density 1.5-1.8 approximately
   Flashpoint: N/A
   Ignition: N/A
   pH value: 13 approx. when in aqueous mixture
   Viscosity: N/A
10. STABILITY AND REACTIVITY
Stability: Stable
Condition to avoid: Non known
Materials to avoid: Non known
Hazardous decomposition products: Non known

11. TOXICOLOGICAL INFORMATION
Toxicological information no available. Well known health effects are available industrially.
Health effects:
Eyes: Can cause burns
Skin: Causes irritation when wet
Inhalation: Causes respiratory irritation
Ingestion: Causes irritation of mouth, throat and digestive tract
Chronic: Respirable dust fraction, if inhaled over a prolonged period Constitutes a health hazard. Such inhalation can give rise to Fibrosis of the lungs
Other: When mixed with water, alkali is released. Precautions should be taken to prevent dry materials entering eyes, mouth and nose and to prevent skin contact with wet mixed material.

12. ECOLOGICAL INFORMATION
Prevent contamination of soil, drains and surface water.
Mobility: Granular powder
Solubility: Forms aqueous mixture
Persistence and degradability: Once set, long term stable
Bio-accumulative potential: Once set, long term stable

13. DISPOSAL CONSIDERATIONS
For large quantities, disposal must be carried out under guidance from local and national legislation. Small quantities can be disposed of as common waste via a licensed waste contractor.

14. TRANSPORT INFORMATION
Not classified as dangerous for transportation.

15. REGULATORY INFORMATION
Symbol: Xi
Contains: Portland Cement mixture
Risk phrases: R36/37/38 irritating to eyes, respiratory system and skin
R14 Risk of serious damage to eyes
Safety phrases: S1/2 Keep locked up and out of the reach of children
S22 Do not breathe dust
S24/25 Avoid contact with skin and eyes
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28 After contact with skin was with plenty of water
S37/39 Wear suitable gloves and eye/face protection

16. OTHER INFORMATION
This data is given in connection with the product being used for the purposes outlined in the Technical Data Sheet available from Construction Chemicals (UK) Ltd. Use of the product for other purposes may result in risks not given above.

If the product is to be used by a third party at work, it is the duty of the initial recipient to ensure that the third party is supplied with the data given above.

Employees have the duty to inform employees and others who may be affected of any hazards given in the data above and any precautions which should be adopted.

Users of the product should undertake their own assessment of work place risks as required by the Health and Safety Legislation.