Product Pack for

Fosroc® Conbextra TS

High-flow, Non-shrink, Aggregate Filled Cementitious Grout

FOSROC

constructive solutions

www.fosroc.com

INDEX

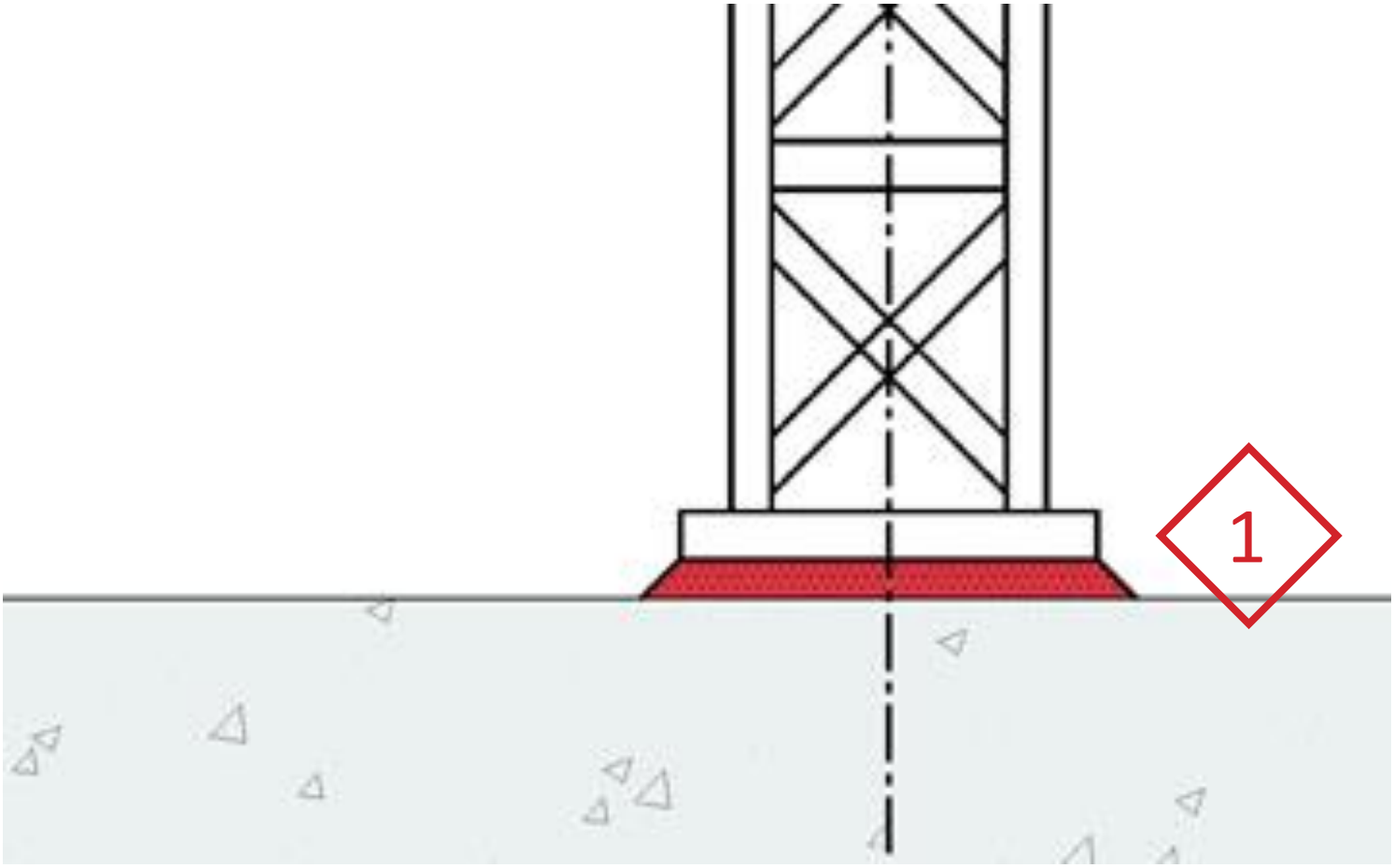
PRODUCT INTRODUCTION

Conbextra TS

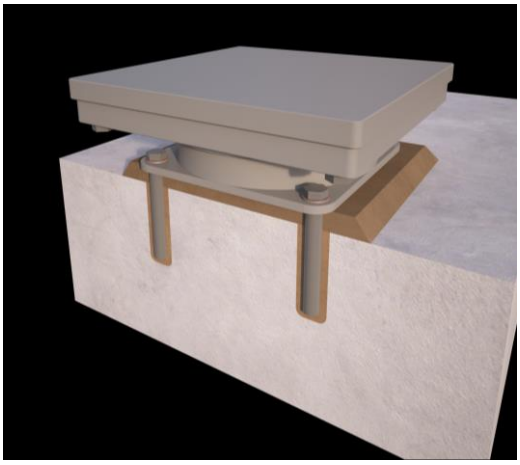
Product Information

Product Name.	**Conbextra TS**.
Description.	High-flow, non-shrink, aggregate filled cementitious grout conforming to the requirements of BS EN 1504-3 Class R4
Photo.	
Colour.	Grey Powder
Packaging:.	25 kg/bag

System & Application Area



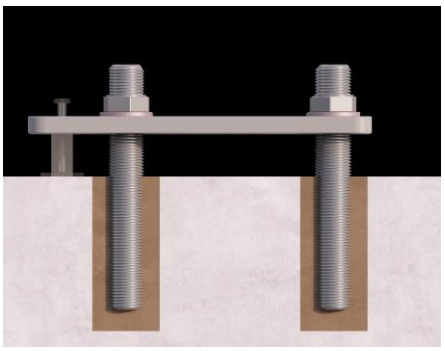
1 Conbextra TS



Stanchion baseplates where a large gap is present

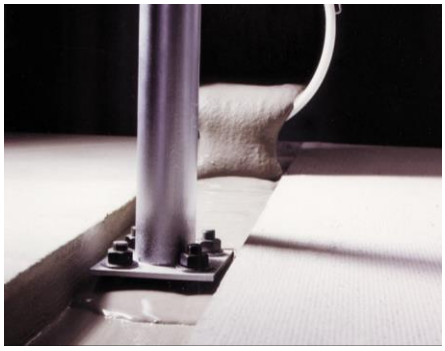
Product Advantages

Conbextra TS is a high-flow, non-shrink, aggregate filled cementitious grout conforming to the requirements of BS EN 1504-3 Class R4



Non-shrink

High strength



Chloride free

Can be pumped or poured

PRODUCT DATA SHEETS

Fosroc® Conbextra TS

constructive solutions

High-flow, non-shrink, aggregate filled cementitious grout conforming to the requirements of BS EN 1504-3 Class R4

Uses

Conbextra TS is used for free flow, non-shrink, cementitious grouting for gap thicknesses 75 to 500 mm. Recommended applications include:

- Stanchion baseplates where a large gap is present
- Joints between pre-cast concrete panels
- Filling box sections

Advantages

- Non-shrink
- High strength
- Chloride free
- Can be pumped or poured
- Suitable for thick sections

Description

Conbextra TS is supplied as a ready to use dry powder. The addition of a controlled amount of clean water produces a free-flowing grout for gap thicknesses 75 - 500mm. In addition the low water requirement ensures high early strength and long-term durability.

Conbextra TS is a blend of Portland cements, graded fillers, selected aggregates and chemical additives. The filler grading produces a highly flowable grout which will not segregate or bleed and reduces the exothermic heat generation and risk of thermal cracking common with gap thicknesses in excess of 100 mm.

Specification clause

All grouting of gap thicknesses 75 - 500 mm shall be carried out using Conbextra TS, a pre-bagged single component cementitious material which conforms with the requirements of BS EN 1504-3 class R4.

It shall be mixed with clean water to the required consistency and not exhibit bleed or segregation

A volumetric expansion of up to 1% shall occur while the grout is in a plastic state by means of a gaseous system.

The compressive strength of the grout must exceed 40 MPa at 7 days and 60 MPa at 28 days.

The storage, handling and placement of the grout must be in strict accordance with the manufacturer's instructions

Standards compliance

Conbextra TS complies with classification R4 according to BS EN 1504-3.

Conbextra TS complies with LU Standard 1-085 'Fire Safety Performance of Materials'.

CE

0370
09
0370-CPR-0845

DOP: UK9-47

Fosroc International Limited

Drayton Manor Business Park, Coleshill Road, Tamworth, B78 3XN, UK

Conbextra TS

EN1504-3: Structural and non-structural repair methods 3 and 4

Compressive strength	Class R4 (≥ 45 MPa)
Chloride ion content	≤ 0.05%
Adhesion strength by pull-off test	≥ 2.0 MPa
Freeze thaw cycling with immersion	≥ 2.0 MPa
Carbonation resistance	Passes
Elastic modulus	32.7 GPa
Fire classification	Class A1
Dangerous substances	Complies with 5.4

Fosroc® Conbextra TS

Properties

The following results were obtained at a water : powder ratio of 0.132 and a temperature of 20°C unless otherwise stated.

Test Method	Standard	EN1504 Requirement	Result
Compressive Strength	EN 12190:1999	Class R4 ≥ 45 MPa	@ 1 Day 14 MPa @ 7 Day 42 MPa @ 28 Days 60 MPa
Bond strength by pull off:	EN 1542:1999	Class R4 ≥ 2.0 MPa	2.7 MPa
Chloride ion content:	EN 1015-17:2000	Class R4 ≤ 0.05 %	0.02%
Freeze thaw cycling:	EN 13687-1:2002	Class R4 ≥ 2.0 MPa	2.4 MPa
Resistance to carbonation d_k	EN 13295:2005	Class R4 ≤ ref concrete	Conforms
Fire rating	EN 1504-3 cl.5.5	-	Class A1 Non-Combustible
Flexural strength	BS 6319 Pt 3:1990	-	6.7 MPa @ 28 days
Setting time	BS 4551 Pt14:1980	-	Initial set: 6 hours
Fresh wet density	-	-	Nominally 2300 kg/m^{-3}
Alkali reactive particles	Method TI-B 52	-	≤ 1.0 vol %
Flow Properties	UK Highways Agency BD27/86 Clause 4.6(b) EN 13395-3	-	750mm within 10 secs
Grout consistency / Water addition		-	3.3 litres water/ 25kg bag
Minimum thickness **Maximum thickness**	- -	- -	75 mm 500 mm

Clarification of property values: The typical properties given above are derived from laboratory testing. Results derived from field applied samples may vary.

Application instructions

Preparation

Foundation surface

The substrate surface must be free from oil, grease or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back / scabbled to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt or debris.

Pre-soaking

For a minimum of 2 hours prior to grouting, the area of cleaned foundation should be flooded with fresh water. Immediately before grouting takes place, any free water should be removed. Particular care should be taken to blow out all bolt holes and pockets. Where water soaking is impossible contact Fosroc Technical Service.

Base plate

It is essential that this is clean and free from oil, grease or scale. Air pressure relief holes should be provided to allow venting of any isolated high spots.

Levelling shims

If these are to be removed after the grout has hardened, they should be treated with a thin layer of grease.

Formwork

The formwork should be constructed to be leakproof as Conbextra TS is a free-flowing grout. This can be achieved by using foam rubber strip or Silicone Sealant 33HM beneath the constructed formwork and between joints.

In some cases it is practical to use a sacrificial semi-dry sand and cement formwork. The formwork should include outlets for the pre-soaking water.

Fosroc® Conbextra TS

The unrestrained surface area of the grout must be kept to a minimum. Generally the gap width between the perimeter formwork and the plate edge should not exceed 150 mm on the pouring side and 50 mm on the opposite side. There should be no gap at the flank sides.

Mixing

Water addition: 3.3 litres per 25 kg bag.

For mixing quantities up to 50 kg, a Bosch (or equivalent) 1150 watt, 280 to 640 rpm, 110 volt drill, fitted with a Conbextra Mixing Paddle (MR3) is suitable.

For best results a mechanically powered grout mixer should be used. Larger quantities will require a high shear vane mixer. Do not use a colloidal impeller mixer.

It is essential that machine mixing capacity and labour availability is adequate to enable the grouting operation to be carried out continuously. This may require the use of a holding tank with provision for gentle agitation to maintain fluidity.

Prior to the first mix the vessel should be wetted and drained. The selected water content should be accurately measured into the mixer. Slowly add the total contents of the Conbextra TS bag, mix continuously for 5 minutes, ensuring a smooth, even consistency is obtained.

Placing

Place the grout within 20 minutes of mixing to gain the full benefit of the expansion process.

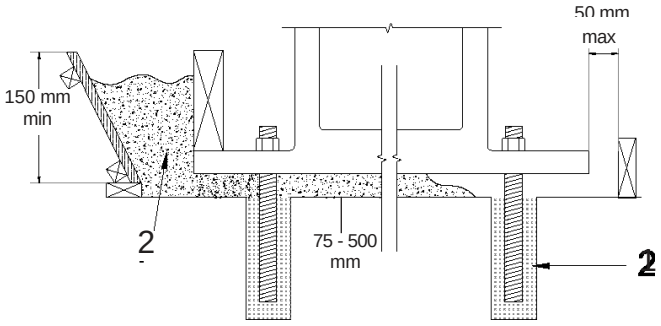
Conbextra TS can be placed in thicknesses 75 to 500 mm in a single pour.

For thinner sections use Conbextra HF grout.

Any bolt pockets must be grouted prior to grouting between the substrate and the base plate.

Continuous grout flow is essential.

Example of a typical hopper system:



1 Conbextra GP or Lokfix* (first stage)
2 Conbextra TS poured or pumped into removable hopper (second stage)
* Also available from Fosroc.*

Sufficient grout must be available prior to starting, and the time taken to pour a batch must be regulated to the time taken to prepare the next one.

The mixed grout should be poured only from one side of the void to eliminate the entrapment of air or surplus pre-soaking water. This is best achieved by pouring the grout across the shortest distance of travel. The grout head must be maintained at all times so that a continuous grout front is achieved.

Where large volumes have to be placed Conbextra TS may be pumped. Screw feed and piston pumps are suitable for this purpose.

When the Conbextra TS has reached trowellable consistency, the unrestrained portion should be cut back to the baseplate/ bearing plate.

Curing

On completion of the grouting operation, exposed areas should be thoroughly cured with Concure WB curing membrane, continuous application of water and/or wet hessian.

Cleaning

Conbextra TS should be removed from tools and equipment with clean water immediately after use. Cured material can be removed mechanically, or with Fosroc Acid Etch.

Estimating

Supply

Conbextra TS is supplied in 25 kg bags.

Yield

Allowance should be made for wastage when estimating quantities required.

The approximate yield per 25 kg bag is 12 litres (0.012 m^{-3})

Limitations

Low temperature working

When the air or contact surface temperatures are 5°C or below on a falling thermometer, warm water (30°C to 40°C) is recommended to accelerate strength development. Substrates should be free from ice.

For ambient temperatures below 10°C the grout consistency should be flowable and the formwork should be maintained in place for at least 36 hours.

Normal precautions for winter working with cementitious materials should then be adopted, specifically protecting the grout from freezing in the first 48 hours after placing.

Fosroc® Conbextra TS

High temperature working

At ambient temperatures above 35°C the mixed grout should be stored in the shade. Cool water (below 20°C) should be used for mixing the grout.

Storage

Store unopened bags in cool dry internal conditions. Conbextra TS has a shelf life of 12 months if kept in a dry store in sealed bags. If stored in high temperature and high humidity locations the shelf life may be reduced to less than 6 months.

Conbextra TS is not supplied in waterproof packaging individually or palletised.

Precautions

Health and safety

For further information refer to appropriate Product Safety Data Sheet available at www.fosroc.com

Fire

Conbextra TS is non-flammable.

Environmental Data (EPD)

GWP Total, A1 – A3: 0.407 kgCO2e per 1kg product.

GWP Total, A1 – D: 0.611 kgCO2e per 1kg product.

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ISO 45001 Occupational Health and Safety CERTIFIED OHS 740931
ISO 9001 Quality Management Systems CERTIFIED FM 610
ISO 14001 Environmental Management CERTIFIED EMS 61113

December 2024

SDS

SAFETY DATA SHEET
CONBEXTRA TS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name CONBEXTRA TS

Product number 1191004UK9

2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Cementitous Grouts

3. Details of the supplier of the safety data sheet

Supplier

Fosroc Limited
Drayton Manor Business Park
Coleshill Road
Tamworth
Staffordshire
B78 3XN
England
Tel: +44 (0) 1827 262222
Fax: +44 (0) 1827 262444
enquiryuk@fosroc.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335

Environmental hazards Not Classified

Human health Dust or splashes from the mixture may cause permanent eye damage. Dust may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing. Dust has an irritating effect on moist skin. Prolonged contact with moist or wet product may cause burns. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

Environmental The product will harden into a solid mass in contact with water and moisture. The resultant material is not biodegradable.

2.2. Label elements

CONBEXTRA TS

Hazard pictograms

Signal word	Danger
Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.
Precautionary statements	P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	ORDINARY PORTLAND CEMENT, CALCIUM SULFOALUMINATE CLINKER
Supplementary precautionary statements	P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER/ doctor. P312 Call a POISON CENTRE/doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

QUARTZ (SiO2) **30-60%**

CAS number: 14808-60-7 EC number: 238-878-4

No. REACH: Exempt of registration

Classification

Not Classified

CONBEXTRA TS

ORDINARY PORTLAND CEMENT	10-30%
CAS number: 65997-15-1	EC number: 266-043-4

Classification
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Skin Sens. 1 - H317
STOT SE 3 - H335

CALCIUM CARBONATE	10-30%
CAS number: 471-34-1	EC number: 207-439-9

Classification
Not Classified

CALCIUM SULFOALUMINATE CLINKER	1-5%
CAS number: 12005-25-3	

Classification
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Skin Sens. 1 - H317
STOT SE 3 - H335

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information No personal protective equipment is needed for first aid responders. First aid workers should avoid contact with wet cement or wet cement containing preparations.

Inhalation Move affected person to fresh air at once. Dust in throat and nasal passages should clear spontaneously. Get medical attention if irritation persists or later develops, or if discomfort, coughing or other symptoms persist.

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin contact After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Get medical attention promptly if symptoms occur after washing.

Eye contact Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention. Show this Safety Data Sheet to the medical personnel.

4.2. Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

Ingestion Ingestion of large doses may result in irritation to the gastrointestinal tract.

CONBEXTRA TS

Skin contact May have an irritating effect on moist skin after prolonged contact, or may cause dermatitis after repeated contact.Prolonged skin contact with wet preparation may cause serious burns without pain being felt, including through clothing.

Eye contact Eye contact may cause serious and potentially irreversible injuries.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

2. Special hazards arising from the substance or mixture

Specific hazards Water used for fire extinguishing, which has been in contact with the product, may be corrosive. No unusual fire or explosion hazards noted.

Hazardous combustion products No known hazardous decomposition products.

5.3. Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known.

Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use work methods which minimize dust production. Avoid contact with eyes and prolonged skin contact. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust.

6.2. Environmental precautions

Environmental precautions Collect and dispose of spillage as indicated in Section 13. Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Dry material: Collect powder using special dust vacuum cleaner with particle filter. Alternatively, damp powder with fine spray (to avoid dust formation) and remove slurry. Place into container and allow to solidify before disposal as described in section 13. Wet material: Clean up wet material and place in a container. Allow to dry and solidify before disposal as described in section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin and eyes. Avoid generation and spreading of dust. Avoid inhalation of dust. Mechanical ventilation or local exhaust ventilation may be required. Change contaminated clothing. Do not eat, drink or smoke when using the product.

7.2. Conditions for safe storage, including any incompatibilities

CONBEXTRA TS

Storage precautions Store in tightly-closed, original container in a dry and cool place. Unsuitable container materials: Aluminium. The product contains less than 2 mg chromate/kg dry cement, and this limit will not be exceeded for 6 months from the packing date stated on the packaging. Seal opened containers and use up as soon as possible. To be stored out of reach of children in its original packaging in a dry place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

QUARTZ (SiO2)

Long-term exposure limit (8-hour TWA): WEL 0,05 mg/m³

ORDINARY PORTLAND CEMENT

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

CALCIUM CARBONATE

Long-term exposure limit (8-hour TWA): 10 mg/m³ inhalable dust
Long-term exposure limit (8-hour TWA): 4 mg/m³ respirable dust
WEL = Workplace Exposure Limit

ORDINARY PORTLAND CEMENT (CAS: 65997-15-1)

DNEL Workers - Inhalation; Short term : 3 mg/m³

BASIC COPPER CARBONATE (CAS: 12069-69-1)

PNEC
- Fresh water; 7.8 µg/l
- marine water; 5.2 µg/l
- STP; 230 µg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls Atmospheric levels of dust must be maintained within the Occupational Exposure Limit. Where mechanical methods are inadequate or impractical, appropriate personal protective equipment must be used.

Personal protection Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. This product may present a chromate (VI) allergy risk. It contains a chromate reducing agent, but users should wear appropriate personal protective equipment.

Eye/face protection The following protection should be worn: Chemical splash goggles. (conform EN 166)

Hand protection Use impervious, abrasion and alkali resistant gloves. Wear protective gloves. Nitrile gloves or rubber gloves are recommended. Other types of gloves can be recommended by the gloves supplier. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.

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Other skin and body protection	Use barrier creams to minimise skin contact. Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene measures	This product contains silica sands. The grain size distribution of silica sand present means that it is not classified as hazardous. However, any respirable crystalline dust generated by secondary processing may cause health effects. Prolonged and /or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled.
Respiratory protection	Wear a respirator fitted with the following cartridge: Particulate filter, type P2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Dusty powder.
Colour	Grey.
Odour	Odourless.
Odour threshold	Not relevant.
pH	pH (concentrated solution): >12
Melting point	>1250°C
Initial boiling point and range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	The product is not flammable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	1.5 @ 20°C
Solubility(ies)	Slightly soluble in water. Hardens in contact with water.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not applicable.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.
Comments	Information given is applicable to the product as supplied.

CONBEXTRA TS

9.2. Other information

Other information Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity When mixed with water, hardens to form a stable mass that is not reactive in normal conditions.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions. When stored under humid conditions, the chromate neutralization will decrease. This product contains a chromate reducing agent to reduce the risk of allergic dermatitis causes by chromium (VI). This product has a shelf life. If not stored in accordance with packaging instructions (sealed and dry), there is an increased risk of the presence of hexavalent chromate leading to an increased risk of an allergic reaction.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Water, moisture.

10.5. Incompatible materials

Materials to avoid Acids. Chemically-active metals.

10.6. Hazardous decomposition products

Hazardous decomposition products No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin sensitisation

Skin sensitisation Some individuals may exhibit eczema upon exposure to wet cement caused either by the high pH which induces irritant contact dermatitis, or by an immunological reaction to soluble Cr (VI) which elicits allergic contact dermatitis. The cement contains a soluble Cr (VI) reducing agent and as long as the mentioned period of effectiveness is not exceeded, a sensitising effect is not expected.

Inhalation Irritating to respiratory system. Inflammation of the nasal mucous membrane by exposure to cement dust.

Ingestion May cause irritation of mouth, throat and digestive tract.

Skin contact This product is strongly irritating. Prolonged contact may cause burns. May cause sensitisation by skin contact.

Eye contact Irritating and may injure eye tissue if not removed promptly.

Acute and chronic health hazards Repeated and/or prolonged contact may lead to dermatitis.

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment.

CONBEXTRA TS

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish The product is not expected to be hazardous to the environment. The addition of cements to water will, however, cause the pH to rise and may therefore be toxic to aquatic life in some circumstances.

12.2. Persistence and degradability

Persistence and degradability The product is not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility The product hardens to a solid, immobile substance. The product is not volatile but may be spread by dust-raising handling.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not empty into drains, sewers or water courses. Cement that has exceeded its shelf life: when demonstrated that it contains more than 0.0002% Cr (VI), the product shall not be used other than in controlled closed and totally automated processes. It may be recycled and/or treated again with a reducing agent.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Note that fully cured material is not considered as hazardous waste.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

1. UN number

Not applicable.

2. UN proper shipping name

Not applicable.

3. Transport hazard class(es)

No transport warning sign required.

4. Packing group

Not applicable.

5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

CONBEXTRA TS

6. Special precautions for user

Not applicable.

7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.

Guidance Workplace Exposure Limits EH40.
Respiratory protective equipment at work (HSG53).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information For professional users only. Only trained personnel should use this material.

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 22/05/2019

Revision 10b

Supersedes date 22/05/2017

SDS number 10843

Hazard statements in full H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

DECLARATION OF PERFORMANCE

Number: UK9-47

UK DECLARATION OF PERFORMANCE

In compliance with the Construction Products Regulation (EU) No 305/2011 as amended by The Construction Products (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/465)

1 Unique identification code of the product-type:

CONBEXTRA TS, 1191004

2 Intended use as foreseen by the manufacturer of the construction product in accordance with the harmonised technical specification:

Structural and non-structural repair methods 3 and 4

3 Name, registered trade name or registered trade mark and contact address of the manufacturer as set out in article 11 (5)

Fosroc International Limited
Drayton Manor Business Park
Coleshill Road, Tamworth
Staffordshire, B78 3XN, UK

4 Name and contact address of the authorised representative who has received a mandate for the tasks set out on Article 12 (2):

Not Relevant

5 System or systems for assessment and verification of constancy of performance of the construction product in accordance with Annex V

System 2+

6a In the case of a declaration of performance concerning a construction product that is covered by a harmonised standard

EN 1504-3:2005

The notified body

BBA 0836

6b In case of a declaration of performance concerning a construction product for which a European Technical Assessment was issued

Not Relevant

Issue Number: 1

Number: UK9-47

7 Declared performance

Essential Characteristics	Performance	Test Method
Compressive strength	Class R4: ≥ 45 MPa	EN 12190:1999
Adhesion strength by pull-off test	≥ 2.0 MPa	EN 1542:1999
Thermal compatibility: freeze-thaw cycling with immersion	≥ 2.0 MPa	EN 13687-1
Elastic modulus	≥ 20 GPa	EN 13412:2002
Chloride ion content	≤0.05%	EN 1015-17:2000
Carbonation resistance	Pass	EN 13295:2005
Reaction to fire	Class A1	EN 13501-1
Dangerous substances	Complies with 5.4	

8 Appropriate Technical Documentation and/or Specific Technical Documentation:

Not Relevant

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued under the sole responsibility of the manufacturer identified above.

Signed for the manufacturer and in the name of the manufacturer by:

Jon Potter

Technical Manager

Place and Date of Issue: 30th June 2022 Tamworth

Issue Number: 1

METHOD STATEMENT

HIGH-FLOW, NON-SHRINK, AGGREGATE FILLED CEMENTITIOUS GROUT - Conbextra TS

1. Foundation Surface

a. The substrate surface must be free from oil, grease or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back / scabbled to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt or debris.

2. Pre-soaking

a. For a minimum of 2 hours prior to grouting, the area of cleaned foundation should be flooded with fresh water. Immediately before grouting takes place, any free water should be removed. Particular care should be taken to blow out all bolt holes and pockets. Where water soaking is impossible contact Fosroc Technical Service.

3. Base plate

a. It is essential that this is clean and free from oil, grease or scale. Air pressure relief holes should be provided to allow venting of any isolated high spots.

4. Levelling shims

a. If these are to be removed after the grout has hardened, they should be treated with a thin layer of grease.

5. Formwork

a. The formwork should be constructed to be leakproof as Conbextra TS is a free-flowing grout. This can be achieved by using foam rubber strip or Silicone Sealant 33HM beneath the constructed formwork and between joints.

b. In some cases it is practical to use a sacrificial semi-dry sand and cement formwork. The formwork should include outlets for the pre-soaking water.

c. The unrestrained surface area of the grout must be kept to a minimum. Generally the gap width between the perimeter formwork and the plate edge should not exceed 150 mm on the pouring side and 50 mm on the opposite side. There should be no gap at the flank sides.

6. Mixing

a. Water addition: 3.3 litres per 25 kg bag

b. For mixing quantities up to 50 kg, a Bosch (or equivalent) 1150 watt, 280 to 640 rpm, 110 volt drill, fitted with a Conbextra Mixing Paddle (MR3) is suitable.

c. For best results a mechanically powered grout mixer should be used. Larger quantities will require a high shear vane mixer. Do not use a colloidal impeller mixer.

d. It is essential that machine mixing capacity and labour availability is adequate to enable the grouting operation to be carried out continuously. This may require the use of a holding tank with provision for gentle agitation to maintain fluidity.

e. Prior to the first mix the vessel should be wetted and drained. The selected water content should be accurately measured into the mixer. Slowly add the total contents of the Conbextra TS bag, mix continuously for 5 minutes, ensuring a smooth, even consistency is obtained.

8. Placing

a. Place the grout within 20 minutes of mixing to gain the full benefit of the expansion process.

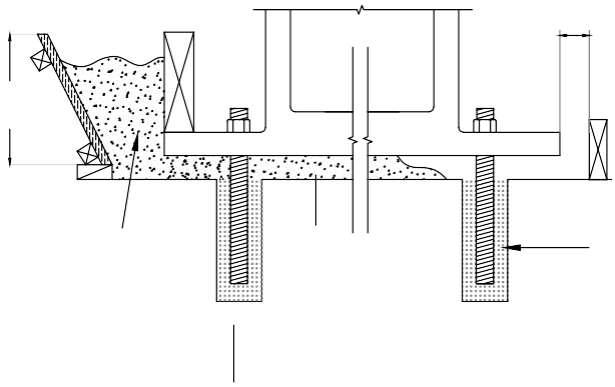
b. Conbextra TS can be placed in thicknesses 75 to 500 mm in a single pour.

c. For thinner sections use Conbextra HF grout.

d. Any bolt pockets must be grouted prior to grouting between the substrate and the base plate.

e. Continuous grout flow is essential.

f. Example of a typical hopper system:



1. Conbextra TS or Lokfix* (first stage)

2. Conbextra TS poured or pumped into removable hopper (second stage)

g. Sufficient grout must be available prior to starting, and the time taken to pour a batch must be regulated to the time taken to prepare the next one.

h. The mixed grout should be poured only from one side of the void to eliminate the entrapment of air or surplus pre- soaking water. This is best achieved by pouring the grout across the shortest distance of travel. The grout head must be maintained at all times so that a continuous grout front is achieved.

i. Where large volumes have to be placed Conbextra TS may be pumped. Screw feed and piston pumps are suitable for this purpose.

j. When the Conbextra TS has reached trowellable consistency, the unrestrained portion should be cut back to the baseplate/ bearing plate.

9. Curing

a. On completion of the grouting operation, exposed areas should be thoroughly cured with Concure WB curing membrane, continuous application of water and/or wet hessian.

10.Cleaning

a. Conbextra TS should be removed from tools and equipment with clean water immediately after use. Cured material can be removed mechanically, or with Fosroc Acid Etch.

PROJECT REFERENCES

FOSROC

constructive solutions

CASE STUDY

Ringsend WWTP

Box-outs/penetrations

Dublin

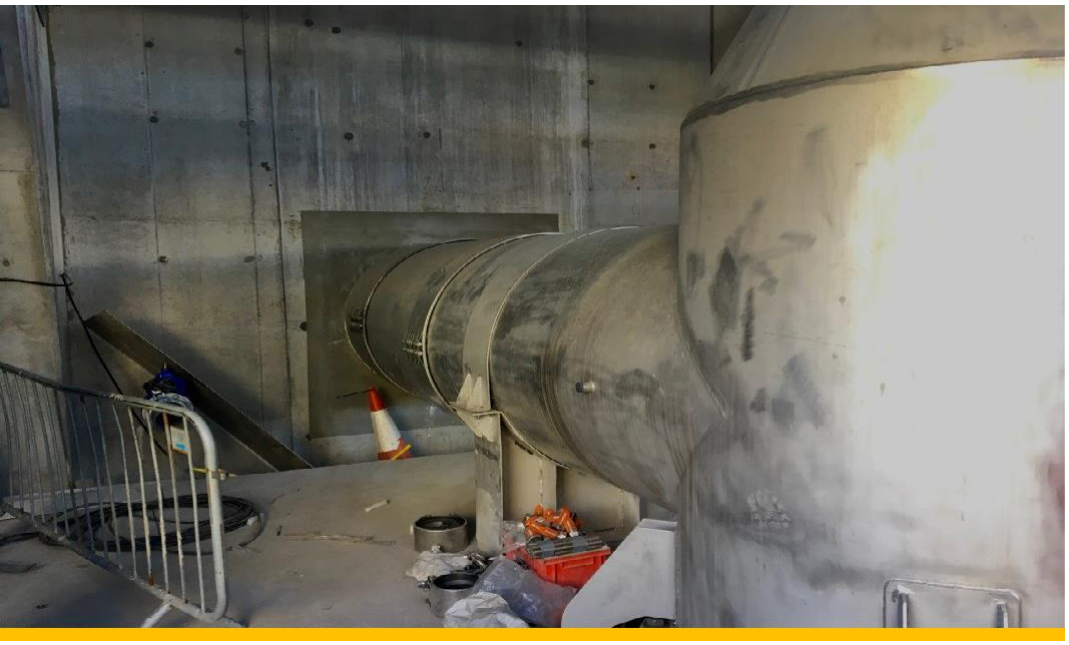
CUSTOMER
Irish Water

SECTOR
Water

DATE
July 2019

PRODUCTS

- Conbextra TS
- Supercast SW20
- Supercast SWX



THE PROJECT

The Ringsend WWTP is undergoing a significant expansion and upgrade. The existing facility is circa 20 years old and is being doubled in size and capacity. Once the new facility is complete, the existing facility will undergo a major upgrade.

One part of the project presented numerous stainless steel pipes ranging in diameters from 0.8 to 1.4 metres through 0.75 metre thick reinforced concrete tank walls. With tank depths over 10 metres, considerable emphasis was put on the selection of the correct solutions and installation.

Mechanical and pipework installation

THE SOLUTION

Perimeters of opes and the circumference of the pipes were sealed with Fosroc Supercast SWX and SW20 hydrophilic waterstops. All opes were shuttered with letterbox openings and circa 12000 litres of Fosroc high-flow, high-strength, non-shrink, Conbextra TS was poured into the voids.

Large stainless steel pipe

THE BENEFITS

Box-outs will always present a challenge for contractors to efficiently and effectively fill and seal the voids around post-applied pipes and penetration. The suite of Fosroc solutions for this critical application was easily mixed and applied. On close inspection the excellent care and attention to detail by the contractor is evident and the solution has performed perfectly as expected.

Box-out detail

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Fosroc International Ltd, Drayton Manor Business Park, Coleshill Road, Tamworth, Staffordshire, B78 3XN, UK

CASE STUDIES

Thackeray Building, London

The Thackeray Building is a 5-storey block of residential flats in Herbrand Street dating back to the early 1900's, constructed of concrete and brick. Over the years the concrete elements have suffered from water ingress which has resulted in spalling and also corrosion of steel 'H' sections above the windows. Fosroc were able to supply a total solution package.

ICAIR, Sheffield

During construction the concrete to form the tanks had been poured to the wrong measurements and in order to correct the situation a product was required that could withstand the pressure and load from the stored water and gain a compressive strength similar to the parent concrete. Repairs were successfully carried out using Renderoc LA60.

A404M, Cannon Lane

Works included reconstruction of the joint edges and repairing defective concrete in the bridge deck with a clear objective to get the works completed quickly and reduce the closure of the very busy major route.
Patchroc 250 thick section repair mortar which exceeds the requirements of BS EN 1504, and Highways England was successfully installed minimising disruption and allowing a rapid return to service.

Central Station, Glasgow

When platform repairs were required at Central Station, Glasgow Fosroc's Paveroc pavement reinstatement mortar was selected due to its rapid strength gain which means it can accept pedestrian traffic at 12 hours. In addition to providing a rapid return to service of the platforms Paveroc's high strength, abrasion and weather resistance ensures that it will provide a durable repair.

Victoria Hospital, Blackpool

The Maternity Wing at Blackpool Victoria Hospital was constructed in the 1960's and over the years had been subjected to many environmental stresses, particularly due to its marine location. Fosroc provided a specification to repair the degraded concrete and bring a new lease of life to the structure using the Renderoc Repair System.

Oldbury Viaduct, M5 Midlands

Fosroc delivered a sustainable motorway repair solution using Renderoc LA60 meeting Highways England's quality standards. Fosroc successfully introduced innovations in product design, and in bulk supply, maintaining regular supply to site through a fully integrated supply chain and production process. This approach helped reduce costs, save time and enabled concrete repairs to be carried out effectively in a challenging environment.

Fosroc offers a full range of construction chemical solutions, helping to protect structures throughout the world. Please refer to our brochures, which include:

www.fosroc.com

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