Plastijoint

FOSROC constructive solutions

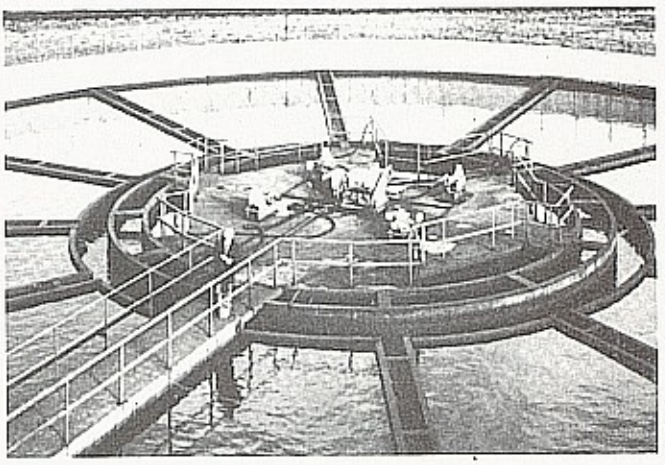
Hand applied bitumen putty sealant

The product in brief

Plastijoint is a bitumen based joint sealant which when warmed is suitable for hand application. It is recommended for sealing joints, particularly vertical and inclined joints, in most types of water retaining structures.

Plastijoint is resistant to bacteriological attack and is recommended for use in most types of liquid retaining structures where biological activity occurs.

- Unaffected by permanent immersion in water
- Tough, weather resistant seal
- Excellent slump resistance
- Easily applied by hand
- Non-toxic
- Designed for use in joints up to 40 mm wide.



Industrial Clarifier. Sheffield. Main Contractor: Henry Boot Construction Ltd

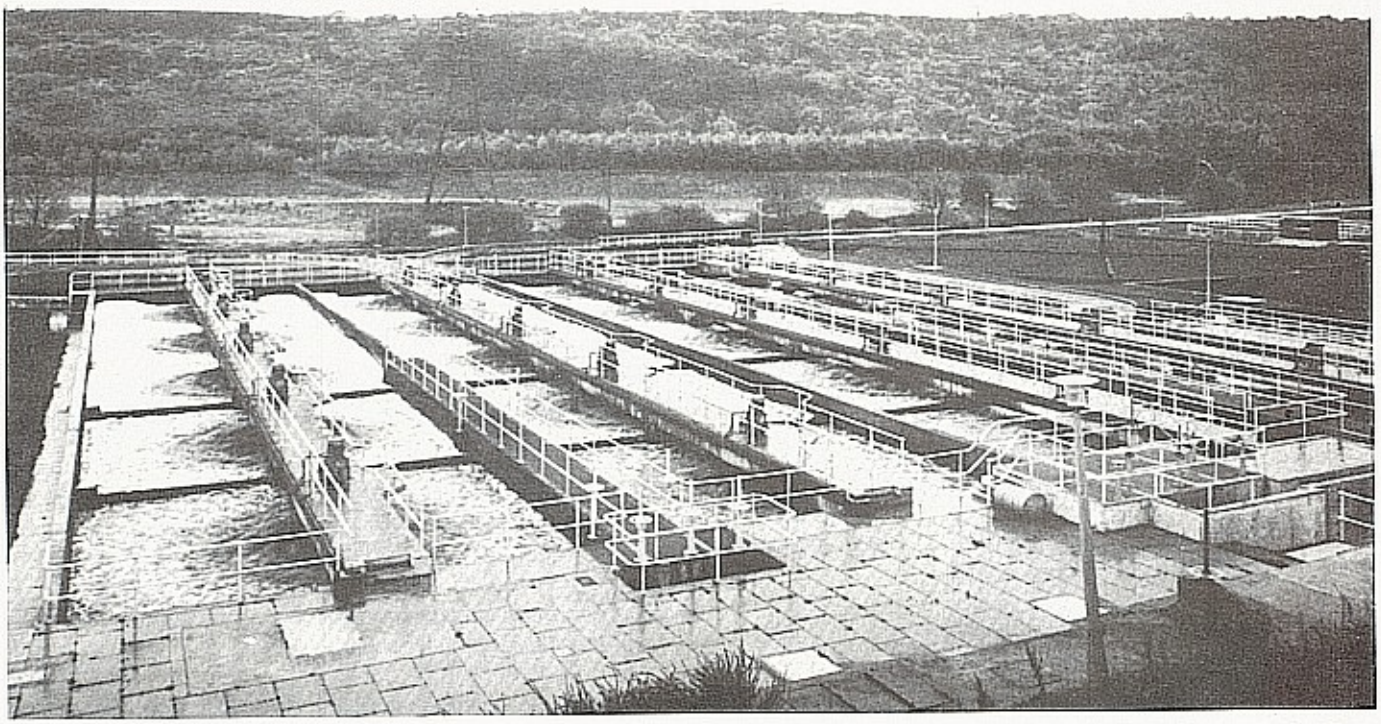
Principal Applications

- Reservoirs
- Sewage disposal works
- Culverts
- Sea walls
- Retaining walls (brickwork and concrete)
- Subways and basement structures

Specification compliance

British Standard 6920:1988
WRC approved (for contact with potable water. Approval No.: 8810511).

Water Pollution Control Works. Halifax. Main Contractor: Henry Boot Construction Ltd



Plastijoint

Description

Plastijoint is a bitumen based joint sealing compound which, when heated, is suitable for hand application.

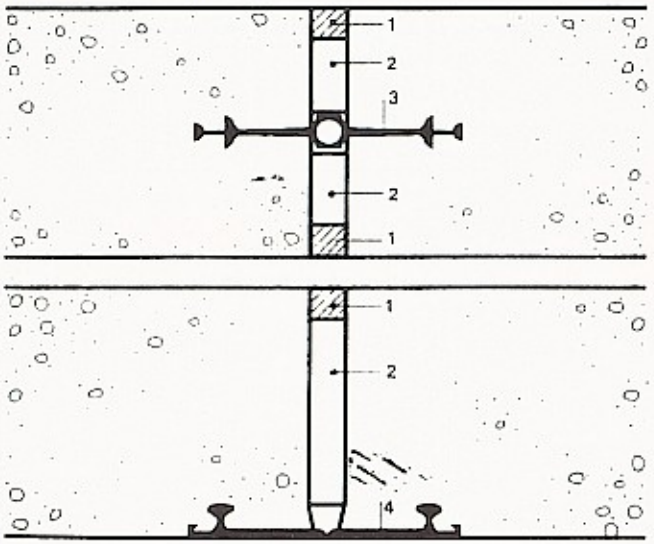
Joint size: Plastijoint may be applied to joints between 20 and 40 mm wide. In most cases it is advisable to form a sealing slot approximately square in cross-section.

Packaging: Tins: 5 litre

Applications

Water retaining structures: Plastijoint is recommended for sealing joints, particularly vertical and inclined joints, in most types of water retaining structures. It is suitable for joints totally immersed in fresh or salt water and for joints in most types of water retaining structures where biological activity occurs. It will remain flexible for a long period without cracking in cold weather or running and slumping in hot weather. Where expansion joints are subject to water pressure, the Plastijoint seals require support from a compressible filler such as Self-Expanding Cork Filler (Hydrocor).

Examples of sealed expansion joints in water retaining structures, basements, etc. are shown below.

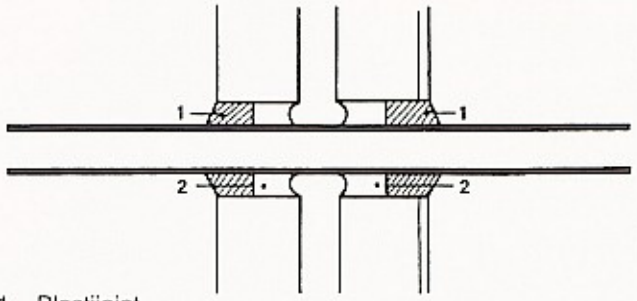


1 Plastijoint
2 * Self-expanding Cork Filler (Hydrocor)
3 * Supercast Hydrofoil waterstop
4 * Supercast Rearguard waterstop

Water excluding substructures: Plastijoint is suitable for sealing joints, including low movement expansion joints in retaining walls, basements etc.

Joints in building services: Plastijoint is suitable for sealing around pipe or cable entry into buildings.

Example of a sealed pipe or cable entry into a building



1 Plastijoint
2 * Firm backing

Further reading: Fosroc Application Guides

Fosroc Application Guides complement the data contained in the Fosroc Product Data Sheets. Each Guide deals with a single building or civil engineering application and presents on a single sheet design information on the use of relevant Fosroc products.
The use of Plastijoint is illustrated in the following Guides:

1 - 1 Open channels
1 - 2 Closed channels in insitu concrete
1 - 3 Closed precast channels
1 - 4 Open reservoirs
1 - 5 Closed reservoirs
1 - 6 Storage tanks in insitu concrete
1 - 7 Concrete watertowers
1 - 8 Pipe entries into tanks
3 - 1 Basements: untanked
3 - 2 Pedestrian subways
3 - 4 Service tunnels
5 - 1 Brick and blockwork walls

Specification

Preparation: The joint surfaces shall be clean, dry and free from dust, scale and surface laitance. New concrete surfaces must be cured before compound is applied.

Primer No. 3 shall be used to prime concrete, brickwork and masonry surfaces when using Plastijoint. Metal surfaces do not require to be primed, but shall be prewarmed.

Application: Plastijoint may be applied by hand after it has been heated. Tins of Plastijoint must be heated in boiling water or field ovens, not by direct heat.

Finishing: Normally Plastijoint will be finished flush and be unpainted. If required, Plastijoint must be sealed with a bitumen sealer, before an oil based paint is applied.

Maintenance: No special requirement, damage should be repaired if and when it occurs.

Plastijoint

Ancillary materials

Primer No. 3 (for use with Plastijoint)
Joint Cleaner

Primer No. 3: A one park black liquid for brush or spray application.

Joint Cleaner: A general purpose, flammable solvent, for cleaning and degreasing. Plastics and plastics finishes should be tested before general application.

Health and safety

There are no health hazards associated with this product in normal use.

Primer No. 3: (For use with Plastijoint.)

Petroleum mixture giving off a flammable heavy vapour. Highly flammable liquid. Flash point minus 1°C (30°F). Store away from heat. Do not use near sources of ignition such as naked flames or lights. Avoid prolonged inhalation of vapour. Avoid contact with skin and eyes. In confined areas use forced ventillation. Operatives should wear appropriate mask and goggles. Refer to Health and Safety data sheet for further information.

Joint Cleaner: Flammable liquid. Flash point 35°C (95°F). Store away from heat. Do not use near a naked flame. Use in well ventilated surroundings. Avoid skin contact and inhalation of vapour. Refer to Health and Safety data sheet for further information.

Site instructions

Joint preparation: Ensure that the joint surfaces are completely dry, clean and frost-free- Remove all dirt, dust. laitance and loose material by rigorous wire brushing. Remove all rust, scale and protective lacquers from metal surfaces. Remove any oil or grease with Joint Cleaner. In expansion joints, Plastijoint must always be supported by a firm backing which will allow free movement. Where a particularly neat finish is required, cover face edges of joint with masking tape before priming and remove immediately after sealing work is completed.

Priming porous surfaces: On concrete, stone, brickwork and timber, Primer No. 3 is required. The applied primer should be touch dry before sealing.

Priming non-porous surfaces: Primer not normally required. Ferrous metals should be treated with an anti-corrosion primer.

Heating: Tins of Plastijoint are heated to 45 to 55°C by placing in a field oven or in boiling water for approximately 1 hour. When using water, the water level should only come almost to the top of the tin (leave the lid on). Plastijoint must not be subjected to direct heating.

Application: Take convenient quantity of material from the tin and mould by hand into a strip. While still hot, push this well down into the cavity to fill all crevices, ensuring good contact with the sides and base of the joint. If necessary caulk home with a piece of damp wood.

Note: If, as sometimes happens, there is honeycombed concrete in the immediate vicinity of the joint, there is the risk that water under pressure may percolate behind the seal and pass into the joint. In such cases, prime the area concerned and apply additional compound, working well into all cavities to give a 'mushroom' finish. Joints subject to flowing water should be finished flush or slightly concave.

Finishing: Heat a stripping knife and, working along the joint, cut away excess material to present a neat finish. In cold weather a gas blowtorch may be run down the seal before trimming. Plastijoint requires no special tools, but the use of a Caulking iron is recommended for easy consolidation and to give a neat finish to the seal.

Cleaning: Clean up equipment immediately after use with Equipment Cleaner, white spirit or paraffin. Care should be exercised in the use of solvents. Appropriate precautions should be taken. For Equipment Cleaner, refer to Health and Safety data sheet.
Remove Plastijoint from the hands with 'Kerocleanse 22', 'Swarfega' or similar industrial hand cleanser.

Contract Application

The designer or contractor may wish to use the services of a specialist sub-contractor for joint sealing work. Names of preferred sub-contractors are available from Fosroc.

Quantities

Guide to Plastijoint quantities:

joint size in mm	litre per metre run	metre per 5 litre tin	joint size in mm	litre per metre run	metre per 5 litre tin
20 x 20	0.40	13	30 x 50	1.5	3.3
25	0.50	10	60	1.8	2.8
30	0.60	8.3	65	2.0	2.6
40	0.80	6.3			
50	1.0	5.0	35 x 25	0.88	5.7
			30	1.1	4.8
25 x 20	0.50	10	40	1.4	3.6
25	0.63	8.0	50	1.8	2.9
30	0.75	6.7	60	2.1	2.4
40	1.0	5.0	65	2.3	2.2
50	1.3	4.0			
60	1.5	3.3	40 x 25	1.0	5.0
65	1.6	3.1	30	1.2	4.2
			40	1.6	3.1
30 x 25	0.75	6.7	50	2.0	2.5
30	0.90	5.6	60	2.4	2.1
40	1.2	4.2	65	2.6	1.9

Plastijoint

Technical data

	Plastijoint
Form:	Stiff putty
Storage life:	2 years
Solids content:	100%
Density:	1.82 kg/litre
Penetration 25°C:	70 to 100 dmm (needle)
Colour:	Black
Application Temperature:	5 to 50°C (Plastijoint heated to 45 to 55°C)
Chemical resistance to occasional spillage:	Dilute acids resistant Dilute alkalis resistant Petroleum solvents not resistant Mineral oils not resistant Vegetable oils not resistant Plastijoint is resistant to the aerobic and anaerobic conditions normally occurring in sewage treatment works.
Drinking water:	Plastijoint is not soluble in water and therefore imparts no taint to it, Plastijoint has been approved by the U.K. National Water Council for use in contact with potable water.
Movement accommodation factor:	Total joint range: 10% for butt joints; 20% for lap joints

Important note

Whilst all reasonable care is taken in compiling technical data on the Company's products all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the Company. It is the customers responsibility to satisfy themselves that each product is fit for its intended purpose; to ensure that the actual conditions of use are suitable, and to check with the Company that they are referring to the latest data sheet issue.

Technical data: ancillary materials

	Primer No. 3
Flash point:	-1°C
Density:	0.85 kg/litre
Storage life:	12 months +
Coverage:	12.5 m^2/litre
Application temperature:	5 to 50°C
Drying time:	1 to 4 hours
Pack size:	5 and 25 litre

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