

Cemband 200

High performance butyl synthetics rubber highly flexible expansion joint waterproofing strip & membrane

Innovative products for your success

Description

Cemband 200 comprises a nominal 2mm thick, butyl rubber sheet laminate, with a fully vulcanized layer colored black.

Uses

Cemband 200 is a butyl rubber membrane, which is designed to bridge over a movement joint, or crack, in a structure to prevent ingress of water at that point.

Typical uses include

- Buried joints in car park decks, podiums, balconies, walkways and other elevated or trafficable areas.
- Over strapping joints in basements, subways, tunnels and substructures in general.
- Added security to roof joints.
- Internal and external over strapping of joints in water retaining structures, culverts and reservoirs.

Advantages

- Extremely durable - resistant to long term weathering and forms a tough and flexible joint flashing.
- Superior mechanical properties – accommodates continuous, pronounced cyclic movement.
- Versatile performance - unaffected by climatic extremes & can be hot vulcanized to create long joints.

Design criteria

Cemband 200 is manufactured in standard widths of 200 mm. The 200mm width is for sealing joints or cracks in structures where the adjacent concrete is sound, and where the joint is of an even width and well aligned. It is also used for buried joints in trafficable surfaces and for sealing joints in bridge decks over which continuous surfacing of the asphalt pavement is acceptable. It is also the preferred width in situations where the membrane is to be permanently immersed. It can be used where porosity of the concrete substrate adjacent or close to the joint edges in condition of unsound. It is also better suited to joints which are excessively wide or misaligned. Joint lengths of greater than 20 m. require a hot vulcanized joint.

Properties

Form:	Butyl rubber laminate
Thickness:	Nominal 2 mm
Application temp:	5 to 50°C
Shore .A. hardness:	65 at 25°C
Tensile strength:	9.1 N/mm ²
Elongation at break:	400 % minimum
Movement:	When used in conjunction with accommodation Cemkcrete E211, it will accommodate continuous cyclic movements which result in the de-bonded area being extended up to 100 % of the de-bonded width.

Note:

When Cemband 200 is used as a deck flashing on a highway bridge below 100 mm of asphalt, it can accommodate 10 mm of movement. For movements between 10 & 20 mm neoprene pad must be installed on top of the deck flashing, suitably recessed to support the surfacing.

Instruction for Application

Joint preparation

Expansion joints must be packed with a firm, consolidated filler, such as Cemkcrete Joint Filler and if necessary, joints may also be pre-sealed using an elastomeric sealant, such as Cemflex PU525, prior to laying of the membrane. Ensure that any materials used in this way are capable of withstanding the anticipated joint movement. Where Cemband 200 is to be extended up to parapets, or other vertical surfaces, a splaying should be created using either Cemkcrete E321 in accordance with good membrane practice.

Surface preparation

Concrete surfaces onto which the membrane is to be applied must be sound, smooth, dry and dust free. New concrete should be fully cured and any residual traces of curing compounds being mechanically removed. The substrate should be prepared to a width of 50mm greater than that of the membrane selected. The prepared surface should be free from irregularities, with well defined arises and no vertical misalignment across the joint. Any traces of dust, dirt and laitance should be removed by grinding, or similar mechanical methods. Any scaling or honeycombing must be repaired using Cemkcrete E321, and allowed to cure completely prior to application of the Cemband 200 system. All traces of dampness must be removed from the substrate by drying gently with a gas torch or hot air blower. The substrate shall be considered dry enough for when dampness does not re-appear within 15 minutes.

Cemband 200

High performance butyl synthetics rubber highly flexible expansion joint waterproofing strip & membrane

Innovative products for your success

Application

Priming

Priming is not normally required.

Preparation of the membrane

This operation is vital to the final adhesion, and performance in use of the Cemband 200 system. Measure and cut the length of Cemband 200 to suit the joint onto which it is to be applied. Lay the Cemband 200 red face upwards, on a clean surface. Lightly buff the red face using an abrasive flap wheel, fitted to a standard electric drill. The membrane is ready when a matt finish is achieved. Care should be taken to avoid over-buffing the membrane and thus exposing the black surface, as this will compromise final performance. Brush away any residual traces of rubber dust and clean using solvent. Mixing and application of the adhesive, the hardener and 'base' components of the Cemkcrete E211 should be stirred thoroughly in order to disperse any settlement before mixing them together. The entire contents of the 'hardener' should be emptied into the 'base' container and the components should be mixed together, using the slow speed drill plus mixing paddle attachment, until a uniform grey color and consistency is obtained. Under no circumstances should part packs be used, or part mixing is attempted. Apply the adhesive onto the substrate using a spreader comb with 3 mm. serrations keeping the resulting serrations parallel to the run of the joint. The adhesive should be laid in minimum 75 mm. wide strips parallel to the run of the Cemband 200 and starting from the outside edge. Lay the primed Cemband 200 into the adhesive and press firmly into place being careful to ensure complete and continuous contact. Finish along the edges with a small triangular fillet of adhesive, removing any excess. The membrane should be applied not more than 20 minutes after mixing of the adhesive, to ensure that the adhesive bond is not disturbed prior to laying asphalt or other surfacing.

Joining the membrane

Cemband 200 can be jointed by a process of hot vulcanization. Details of the equipment required, and techniques to be employed are available by separate request.

Estimating

Supply

Cemband 200: 20m roll x 200mm. width

Storage

Cemband 200 is an inert material, and thus has an indefinite shelf life.

Cemkcrete E211 can be stored for up to 12 months; if kept in its original, unopened containers, in warehouse conditions away from direct sunlight.

Limitations

Joint layouts incorporating Cemband 200 should be kept as simple as possible, such that site jointing is restricted to simple, butt joints. Avoid complex changes of angle or direction.

Precautions

Health and safety

Cemband 200 is hazard-free under normal use.

Cemkcrete E211 should not come in contact with skin or eyes, or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye/face protection. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provides additional skin protection. Should accidental skin contact occur, remove immediately with a resin removing cream followed by soap and water. Do not use solvent. In case of contact with eye, rinse immediately with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

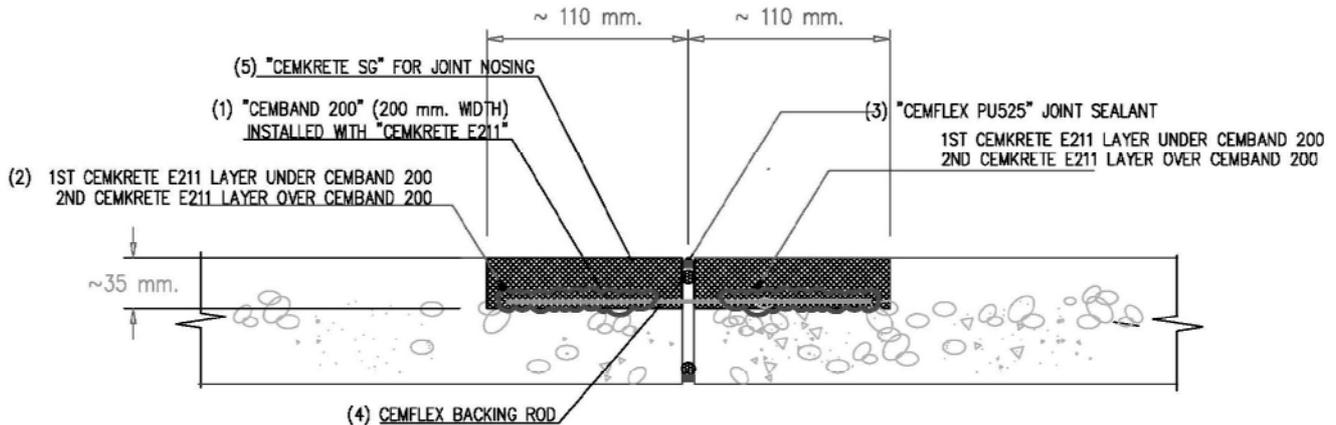
Fire

Cemband 200 and Cemkcrete E211 are non-flammable

Cemband 200

High performance butyl synthetics rubber highly flexible expansion joint waterproofing strip & membrane

Innovative products for your success



TYPICAL SECTION DETAIL OF CEM BAND 200 INSTALLATION SYSTEM

Typical application details

Joints in trafficked surfaces - buried joints

Cemband 200 is recommended for sealing joints in car park decks or podiums, where hot rolled or mastic asphalt is to be applied over the joint. Cemband 200 will withstand the temperatures associated with asphaltting. Cemband 200 can also be used for similar applications in walkways, balconies and link bridges. An example of a typical detail is given below :

1. Cemband 200
2. Cemcrete E211
3. Cemflex PU525
4. Cemflex Backing Rod
5. Cemcrete SG

Important Note: Cemcrete warrants its materials free of manufacturing defects and produced as per standard specifications and sold under the terms and conditions of usages, whilst Cemcrete endeavors to ensure that any advice, recommendation, or information, given through its products literatures are reflects of the R&D in-house lab test and practical sites experience and knowledge based feed backs, however, the products are being used under various conditions and applied beyond its control where or how either directly or indirectly at various locations and places at a different stages that of an intended purposes and uses. Therefore, Cemcrete cannot hold warranty or responsible for resultant consequences, such as damages to the property or assets but the product itself.