

Donseal CJ100

Semi-flexible epoxy control joint filler



DESCRIPTION

Donseal CJ100 is a 100% solids, two-component, self-levelling semi-flexible control joint filler and crack repair material.

Donseal CJ100 is a chemical curing joint filler, with a 1:1 mixing ratio by volume, giving it ideal characteristics for ease of application in control (saw cut) joints.

APPLICATIONS

- » For contraction/control joints that are saw cut or preformed.
- » To fill joints in industrial floors exposed to hard wheeled traffic.
- » Repairing concrete slabs that have experienced random cracking due to shrinkage.

ADVANTAGES

- » Pourable consistency.
- » Prevents deterioration of joint edges.
- » Shock absorbent and durable, withstands wheel traffic and heavy loads.
- » Excellent adhesive properties, requires no primer.
- » Semi-flexible, allows for moderate joint movement.
- » Remains semi-flexible, does not harden with age.

STANDARDS

Conforms to the requirements of ACI 302.1R (Joint Materials).

METHOD OF USE

SURFACE PREPARATION

The surface must be clean, sound, free from oil, grease. Remove dirt, laitance, grease, curing compounds, bond inhibiting impregnations, waxes and any other contaminants.

Concrete surface may be dry or damp, but must be free of standing water. Use clean compressed air to blow out any remaining dust or debris prior to installation. In older concrete, the old joints must be routed out to remove old material and widen, if necessary.

TECHNICAL PROPERTIES:

Colour:	Concrete grey
Mixing ratio:	1:1 by volume
Mixed density:	1.45 ± 0.1 g/ml
Viscosity:	Pourable
Gel time:	40 min @ 25°C
Tack free-time:	3.5 - 5 hr
Elongation at break: ASTM D638	60 ± 10% @ 7 days
Tensile strength: ASTM D638	≥ 2.5 MPa @ 7 days
Shore A Hardness: ASTM D2240	80 ± 5 @ 7 days
Water absorption: ASTM D570	≤ 0.4%

MIXING

Donseal CJ100 comprises of two components, a resin base and a hardener, which are supplied in 1:1 proportions by volume. The base and hardener should be conditioned at 20 - 25°C before use.

Pre-mix each component thoroughly before using for 1 - 3 minutes until a consistent color is achieved. Proportion equal parts by volume of the base and hardener into clean bucket and mix thoroughly for 3 minutes with a low speed (400 - 600 rpm) drill filled with proper mixing paddle, until uniform colour is achieved. Mix only the quantity that can be applied within its gel time.

APPLICATION

If the joint depth exceeds 5 cm, use a backer rod to limit the depth of the joint filler to 5 cm. Fine clean sand may be used to close off small shrinkage cracks in the bottom of joints prior to placement of Donseal CJ100.

In accordance with ACI 302, semi-rigid epoxy fillers should be installed full depth in saw cut joints and at least 2.5 cm deep in formed joints.

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Donseal CJ100 can be installed with a barrel gun or poured into the joint from a suitable container. Two passes may be required, as pourable leveling materials will settle in the joint. The second pass must be made within 12 hours at 25°C.

The filled joint should be flush with the floor surface. It is recommended to use masking tape on each side of the joint to maintain a clean and uniform joint sides. Remove the masking tape directly after the material settles in the joint.

Alternatively, another installation technique is to overfill the joint. Best practice is to allow Donseal CJ100 to cure overnight (around 24 hours) before shaving. Cut Donseal CJ100 flush with a sharp razor so that the top surface is flush with the surface of the concrete that define the control joint.

An industrial heating gun or torch may be required to soften cured resin before shaving. Apply heat for 10 - 15 seconds. Strike-off flush with the floor surface and remove any excess material where required before it hardens.

ACI 302 recommends filling and sealing of the joint is deferred as long as possible to minimize the effects of shrinkage-related joint opening on the filler or sealant.

If concrete shrinkage-related openings do occur, Donseal CJ100 can be reapplied.

WORKING CONDITIONS

Donseal CJ100 should not be applied at temperatures below 5°C. When exposed to temperatures over 35°C it will have a shorter pot and working life.

LIMITATIONS

- » Do not thin Donseal CJ100. Addition of solvents may prevent proper cure.
- » For best results, materials should be maintained between 20 – 25 °C during application
- » Not designed for use in expansion (moving) joints. For application in non-moving joints only.
- » Donseal CJ100 should be installed full depth when sealing construction/control joints.
- » ACI 302.1R recommends a minimum of 3 months for all semi-rigid epoxies. The longer the time period allowed, for curing of the concrete prior to installation of Donseal CJ100, the better the performance.
- » Epoxies may yellow or discolour upon exposure to strong sources of UV radiation such as from sunlight, and some types of industrial artificial lighting. However, this will not heavily effect the performance of the material.

CLEANING

All tools should be cleaned immediately after finishing by DCP solvent. Hardened material should be removed mechanically.

PACKAGING

Donseal CJ100 is available 7.6 litre kit (3.8 litre base and 3.8 litre Hardener) and 30 litre kit (15 litre base and 15 litre hardener).

Donseal CJ100 is also available in easy to apply co-axial cartridges of 250 ml.

CONSUMPTION IN JOINTS

(Linear meter per 1 litre, including 10% wastage)

Width \ Depth	Width					
	3 mm	5 mm	10 mm	15 mm	20 mm	25 mm
10 mm	30.0	18.0	9.0	6.0	4.5	3.6
15 mm	20.0	12.0	6.0	4.0	3.0	2.4
20 mm	15.0	9.0	4.5	3.0	2.2	1.8
25 mm	12.0	7.2	3.6	2.4	1.8	1.4
30 mm	10.0	6.0	3.0	2.0	1.5	1.2
35 mm	8.5	5.1	2.5	1.7	1.2	1.0
40 mm	7.5	4.5	2.2	1.5	1.1	0.9
45 mm	6.6	4.0	2.0	1.3	1.0	0.8
50 mm	6.0	3.6	1.8	1.2	0.9	0.7

STORAGE

Protect from frost and store under dry warehouse conditions at temperatures between 5°C and 30°C.

SHELF LIFE

Donseal CJ100 has a shelf life of 24 months in unopened containers and 12 months for cartridges, from date of manufacture if stored properly under good conditions.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.

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CAUTIONS

HEALTH AND SAFETY

For further information refer to the Material Safety Data Sheet.

FIRE

Donseal CJ100 is nonflammable.

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Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

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