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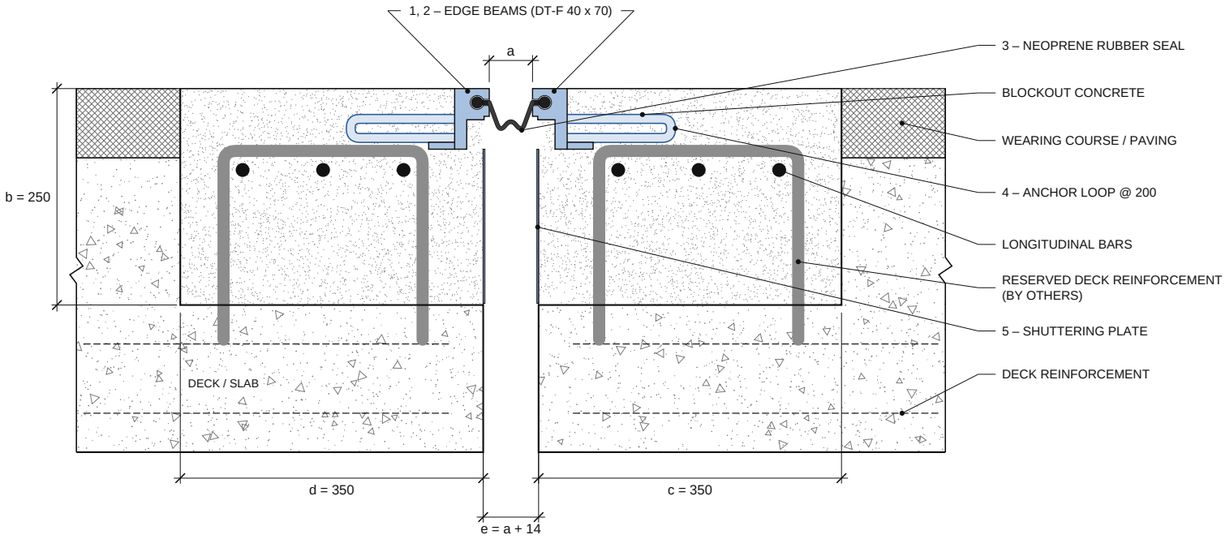
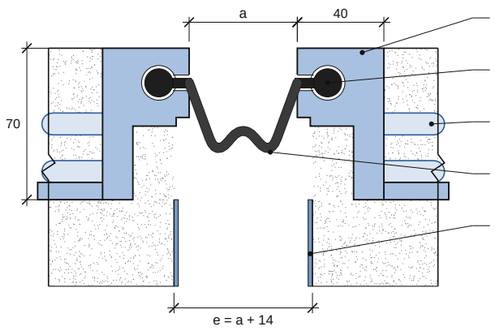
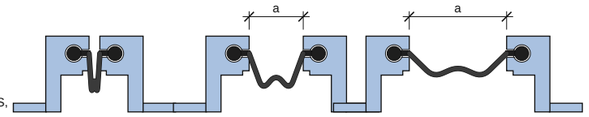


1 CL100 EXPANSION JOINT

SECTION – PARTS NUMBERED AS TDS (a = 50 MID, AT INSTALLATION)



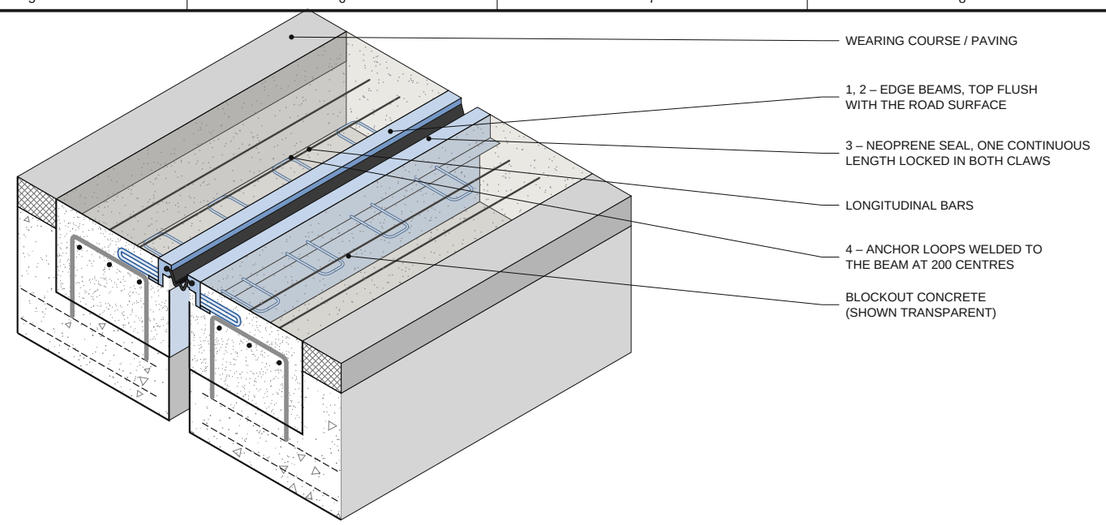


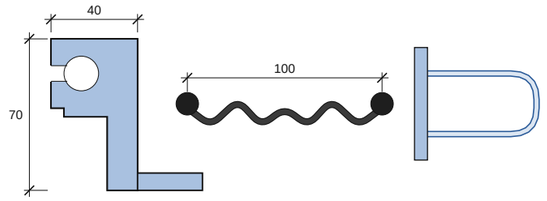
a MIN.	a MID.	a MAX.
10 mm	50 mm	90 mm

TOTAL MOVEMENT 80 mm (±40 FROM MID)

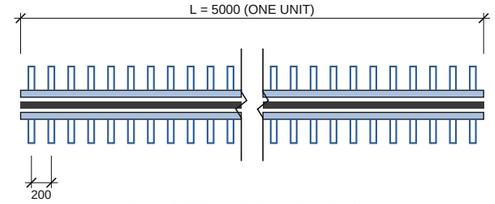
2 CL100 EXPANSION JOINT

3D VIEW – BLOCKOUT SHOWN TRANSPARENT





1, 2 EDGE BEAM	3 RUBBER SEAL	4 ANCHOR LOOP
DT-F profile, Q355B	Neoprene (CR), in a roll	Deformed steel bar, plan view



ANCHOR LOOPS AT 200 CENTRES, BOTH BEAMS
TEMPORARY FIXING FRAMES AT MAX. 1.0 m

3 EDGE BEAM & SEAL

ENLARGED – a = 50 (MID)

4 SEAL OPENING

CLOSED – MID – OPEN

5 PRODUCT PARTS

NOT TO SCALE

6 PLAN – ONE UNIT

SEAL FITTED IN ONE CONTINUOUS LENGTH

UNIJOINT CL100 – PROFILE SELECTION (REFER TO TDS), mm

TYPE	MOVEMENT (TOTAL)	a			BLOCKOUT			LENGTH (UNIT)	ANCHOR SPACING
		MIN	MID	MAX	c	d	b		
CL 100	80 (±40)	10	50	90	350	350	250	5000	200

a = seal opening at the surface; e = gap between the concrete faces (= a + 14, FD100); c, d = blockout width each side;
b = blockout depth from the road surface. Anchor loop spacing 200. a = 50 at installation unless the engineer directs otherwise.

GENERAL NOTES (FOR GUIDANCE ONLY)

1. UNIJOINT CL100 is a single-gap section steel expansion joint for bridges, viaducts and elevated roads: steel edge beams anchored into the deck with a continuous neoprene seal (TDS). Total movement 80mm – opening a from 10 (closed) to 90 (open).
2. Joint selection, gap setting, blockout concrete, anchorage and reinforcement are designed by the bridge / structural engineer.
3. Set the edge beams level with the finished road surface with temporary frames at max. 1.0m. Weld the anchor loops to the reserved reinforcement (Ø16mm or larger) every 2–3 bars; avoid excessive heat. Loosen the frames after initial set, max. 2 hours after concreting; touch up with zinc-rich primer.
4. Leak-proof formwork (2mm steel plate or equal). High-strength blockout concrete as specified, fully compacted and cured; no traffic until it has gained strength. Keep mortar out of the seal grooves. Cover the joint during paving.
5. Edge beams protected with grey epoxy zinc-rich primer, 60 MICRONS. Seal supplied in a roll and fitted on site in one continuous length.
6. Clean the seal groove regularly; replace the seal if it leaks or tears. Inspect the beam / pavement interface for cracks.

PARTS (NUMBERED AS TDS)

NO.	PART	DESCRIPTION	MATERIAL
1, 2	EDGE BEAM	DT-F steel profile 40 x 70 with claw for the seal bulb	Q355B
3	RUBBER SEAL	100 W-seal, bulbs locked into both edge-beam claws	NEOPRENE (CR)
4	ANCHOR LOOP	Looped anchor bar on the bottom flange, welded to the beam @ 200	STEEL BAR
5	SHUTTERING PLATE	Steel plate on the gap face, closes the blockout for casting	STEEL

Edge beams: grey epoxy zinc-rich primer, 60 MICRONS. Edge beam grade and size from the supplier drawing FD100.

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This drawing is a generic product illustration. It is NOT an engineering design and has not been prepared, checked or endorsed by a professional engineer. Unity Reliance (M) Sdn Bhd is a product supplier, not a design consultant. All sizes, bedding thickness, edge distances, reinforcement, dowels and installation details shall be designed, verified and approved by the project's qualified engineer. Unity Reliance (M) Sdn Bhd accepts no responsibility for structural design, site conditions, workmanship, or any loss or damage arising from the use of this drawing. Product supply is governed by the relevant TDS and terms of sale.

REVISIONS

REV	DATE	DESCRIPTION
0	29/10/26	FIRST ISSUE (CSJ STRIP SEAL)
A	06/11/26	REDRAWN AS CL100 – NEW TDS
B	13/11/26	ANCHOR STUDS → ANCHOR LOOPS

PRODUCT
UNIJOINT CL100 SECTION STEEL EXPANSION JOINT

DRAWING TITLE
UNIJOINT CL100 BRIDGE EXPANSION JOINT

DRAWING NO.
UR-JT-04

REV
B

SCALE	SIZE	DATE	DRAWN
NTS	A3	13/11/26	UR

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