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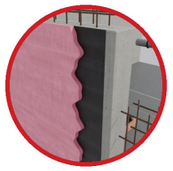


UNICOAT BITUMEN 300
Water-based bitumen coating on the external wall face: primer + min. 2 coats. Solvent-free, so safe against XPS.

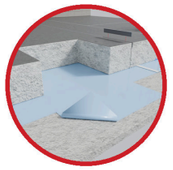
UNIFLEX XPS BOARD
Protection board over the cured coating, cut back here (wavy edge) to show the UNICOAT BITUMEN 300 underneath.



KICKER JOINT
UNISWELL SW47
25 × 19mm strip bonded with UNISTICK CA on the kicker centreline, min. 50mm cover. Swells on contact with water.



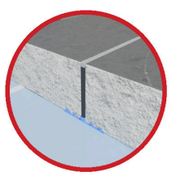
BRICK WALL
UNIPROOF DPC
Laid flat on a mortar bed between brick courses, full wall width. Stops moisture rising up the wall. (Roll shown being laid.)



UNDER THE SLAB
UNIPROOF DPM
PE sheet on the lean concrete, laps 200mm taped; slab cast on top. Stops ground moisture rising. (Slab cut away, corner peeled back.)



INDUCED CONTRACTION JOINT
UNIJOINT CI-T 50
Top crack inducer pressed into the fresh slab, top flush. The slab cracks straight down below it, not at random. (Shown lifted out.)

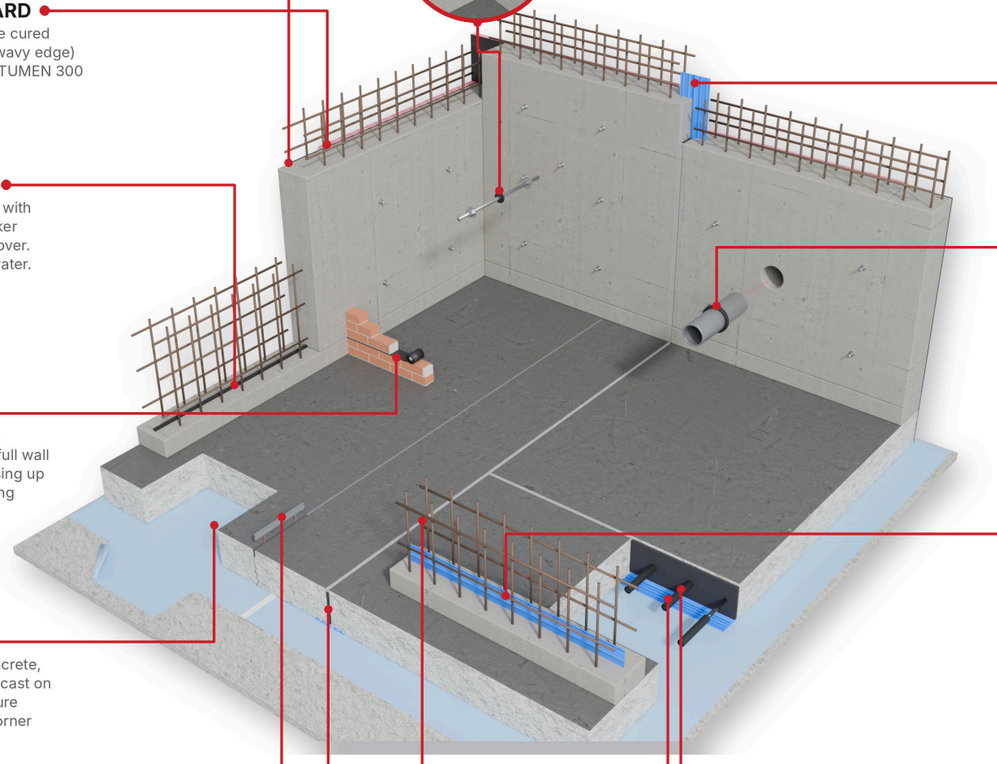


EXPANSION JOINT – SLAB
UNIFLEX PE FILLERBOARD
Full depth through wall and slab, seated on the UNISTOP EEJ bulb.

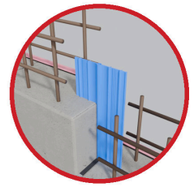
UNISEAL PU SEALANT
On the exposed joint face, over the fillerboard.



UNISWELL RING
5mm hydrophilic ring at the middle of the form tie (wall centre). Swells to seal the tie path. (Shown enlarged.)



EXPANSION JOINT – WALL
UNISTOP IEJ WATERSTOP
Internal expansion profile on the wall centreline, hollow centre bulb on the joint. Factory L-joint to the EEJ in the slab.



PIPE PENETRATION
UNISWELL SW47
One full wrap bonded round the pipe at mid-wall with UNISTICK CA before casting. Swells to seal around the pipe. (Pipe shown pulled out.)

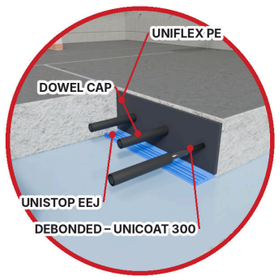


KICKER / CONSTRUCTION JOINT
UNISTOP ICJ WATERSTOP
Internal construction-joint profile centred on the kicker joint, half in each pour, wire-tied through the eyelets. On the kicker, clear of the slab rebar.



DOWELLED SLAB JOINT
UNIJOINT RUBBER DOWEL CAP
Over the debonded half of each dowel bar (by others), coated with UNICOAT BITUMEN 300; end gap lets the slab slide. (One cap pulled off.)

UNISTOP EEJ WATERSTOP
External expansion profile on the blinding under the joint, ribs up into both pours, bulb on the joint line.



LEGEND

- Concrete / lean concrete (by others)
- Brickwork (by others)
- UNICOAT BITUMEN 300
- UNIFLEX XPS protection board
- UNISTOP PVC waterstop (ICJ / IEJ / EEJ)
- UNISWELL SW47 / RING, UNIJOINT dowel cap
- UNIFLEX PE fillerboard, UNIPROOF DPC
- UNIJOINT CI-T crack inducer
- UNIPROOF DPM (PE sheet)
- UNISEAL PU sealant
- Reinforcement (indicative only)
- Form tie / pipe / dowel bar (by others)

GENERAL NOTES (FOR GUIDANCE ONLY)

1. Typical joints shown together for illustration – not one design. Read with each product's UR drawing and TDS for sizes and installation.
2. Joint layout, cover, laps and reinforcement as per the project engineer.
3. UNISWELL SW47 (25 x 19mm) bonded with UNISTICK CA, min. 50mm cover; non-movement joints only. One full wrap at pipes.
4. Wall construction-joint waterstops sit on the kicker (UNISTOP ICJ), clear of the slab rebar.
5. Expansion joints: UNISTOP IEJ in walls, EEJ on lean concrete in slabs. UNIFLEX PE full depth, UNISEAL PU on the face.
6. Dowels: debonded half coated with UNICOAT 300, UNIJOINT dowel cap over it, end gap (UR-JT-01).
7. UNIPROOF DPM on lean concrete, laps 200mm taped (UR-PF-02). UNIPROOF DPC on a mortar bed, full wall width (UR-PF-01).
8. UNIJOINT CI-T pressed into the fresh slab, top flush; contraction joints only (UR-JT-03).
9. Water-based UNICOAT BITUMEN 300 against XPS – solvents dissolve polystyrene.

3D ILLUSTRATION – CONCRETE JOINTS & WATERPROOFING

CUT-AWAYS FOR CLARITY – FORM TIE ENLARGED, PIPE / DOWEL CAP / CRACK INDUCER PULLED OUT – NOT TO SCALE

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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	05/11/26	FIRST ISSUE - 3D ILLUSTRATION
A	05/11/26	DOWEL JOINT EEJ - RIBS UP
B	05/11/26	XPS WAVY CUT-BACK SHOWS BITUMEN
C	05/11/26	ADD DPM, DPC, CI-T; RETITLED
D	05/11/26	DPM CUTAWAY; BRICKS; XPS TEXTURE

PRODUCT
UNISWELL SW47 / RING • UNISTOP ICJ / IEJ / EEJ
UNIJOINT DOWEL CAP / CI-T • UNIPROOF DPM / DPC
UNIFLEX PE / XPS • UNISEAL PU • UNICOAT 300

DRAWING TITLE
CONCRETE JOINTS & WATERPROOFING
3D ILLUSTRATION

DRAWING NO.
UR-SY-01

REV
D

SCALE	SIZE	DATE	DRAWN
NTS	A3	05/11/26	UR

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