

Bundseal W1 Product Data Sheet

1. PRODUCT DESCRIPTION

Bundseal W1 is manufactured from 1mm thick 316 Stainless Steel in accordance with the requirements of CIRIA guidance document C736.

Standard unit length is 3.00m. Other sizes are available to suit bund wall height and avoid on-site cutting. Prefabricated intersections are strongly recommended to simplify installation; ensure waterstop continuity; and improve water tightness.

2. TYPICAL USES

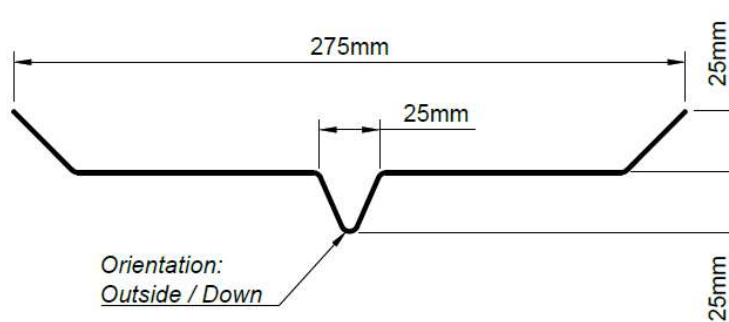
Bundseal W1 is an impermeable barrier to prevent the escape of hazardous liquids through vertical or horizontal construction and/or movement joints in reinforced concrete structures.

It is highly resistant to chemicals, high temperatures and fire; and suitable for use in high risk Class 2 & 3 secondary / tertiary containment.

3. VARIANTS

W1 is available in a range of profile widths for different bund wall heights / hydrostatic pressures:

Variant [mm]	BUND HEIGHT SUITABILITY GUIDANCE [250mm wall section – Construction/Movement joint]							
	≤ 1m		≤ 2m		≤ 3m		≤ 4m	
	CJ	MJ	CJ	MJ	CJ	MJ	CJ	MJ
W1-143	✓	✓	✓					
W1-219	✓	✓	✓	✓	✓			
W1-275	✓	✓	✓	✓	✓	✓	✓	
W1-295	✓	✓	✓	✓	✓	✓	✓	✓



4. DURABILITY

Bundseal W1 is made from high grade stainless steel so will provide an effective seal for the life of the structure. The waterstops are resistant to a wide range of chemicals and hazardous materials (refer to Bundseal Chemical Resistance Table). However, if a chemical spill or fire occurs a suitably qualified structural engineer or surveyor should determine whether the waterstop will still function adequately.

5. ANCILLARY PRODUCTS

Prefabricated intersections are strongly recommended to simplify installation and improve performance. These items are manufactured to suit individual project requirements, but typically involve L, T, & X intersections in both horizontal and vertical planes.

Bundseal 'No-Weld' chemical & high temperature resistant adhesive jointing compound provides the contractor with a lap splicing alternative solution to on-site welding. Also used as a contact adhesive to bond retrofit waterstops to existing substrates.

Bundseal B300 chemical and high temperature resistant sealant for expansion joints.

Bundseal Fire Retarding Rope non-ceramic backing rod flame stop for expansion joints.

6. CONSTRUCTION

General: Bund walls and floors should be designed as a water-retaining structure to BS EN 1992-3 using best practice from the water industry e.g. UKWIR 2011, and with reference to CIRIA C736.

Waterstops must be placed centrally across the joint, whether an internal or external profile is used.

Non-movement joints: Joint surfaces should be clean and free of laitance and dust or dirt, and either retarded & jet washed or scabbled to expose aggregate to ensure a good key between pours.

Induced joints: Waterstops must be positioned wherever planned saw-cuts will be made.

Movement joints: The waterstops' central 'V' must be positioned within the joint gap. A compressible filler board is required to maintain the void, and a flexible sealant applied to external faces to prevent debris entering the joint. If expected movement requires a joint width >25mm, or movement is in more than one axis, select Bundseal W4 profile.

Retrofit solutions: require the use of adhesive and mechanical fixings for bonding to an existing structure.

7. SHELF LIFE: Indefinite

8. PERSONAL PROTECTIVE EQUIPMENT (PPE):

Skin protection	Wear gloves and work clothes and safety shoes to protect against sharp edges and corners.
Eye protection	Wear goggles or safety glasses with side shields for general handling. Use a suitable shade welding helmet for MIG/TIG processes.
Respiratory protection	Wear face mask when cutting or welding or welding stainless steel. Weld in a suitably ventilated area.