

# Styrobeck's Form-Flow is light as a feather



...and tough enough to protect the most challenging jobs.



## FORM FLOW PROTECTS

Styrobeck's Form Flow is a protective panel system specifically designed to handle the action when it comes to protecting below ground walls. Form Flow protects against accidental damage during construction and backfilling where sharp stones can rupture the water proof membrane.

The tough lightweight system protects the waterproof membrane against penetration and provides extra drainage to help channel the moisture away.

## FORM FLOW IS USER FRIENDLY

Form Flow is made from 100% recycled EPS material and environment friendly.

It is also light and easy to transport onto site and can be handled, cut and installed easily, in even the most difficult situations so it saves on time and labour.

## FORM FLOW IS FULLY TESTED

Fully tested and appraised it meets all NZBC requirements for retaining wall structures.

## MADE FROM 100% RECYCLED MATERIAL

Form Flow is made from a specific process using only recycled EPS components. Unlike normal EPS blocks the result is a more porous material that still offers all the protective properties associated with EPS products.



**100% Recycled**

**FORM~FLOW™**  
TAKES A LOAD OFF RETAINING WALLS



...polystyrene solutions that add value!

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[WWW.STYROBECK.CO.NZ](http://WWW.STYROBECK.CO.NZ)  
OR CALL FREE 0800 262 466

## INSTALLATION FAST AND SIMPLE

Simply place the Form Flow panel firmly against the waterproofing membrane and above the drainage pipe immediately after the tanking is completed. Ensure all waterproofing membrane is protected.

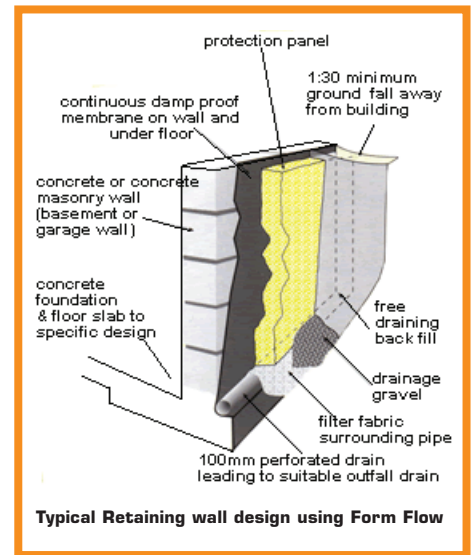
A non-solvent based glue can be used to hold panels in place whilst installing. Backfill with granular drainage metal or other free draining backfill.

Walls taller than 5 metres high will require double thickness of Form Flow at the base to ensure adequate resistance to compression loads.

Form Flow can be easily cut to shape at site to fit any retaining wall.

When installed correctly Form Flow meets the provisions of NZBC B1.3.1, B1.3.2 and B1.3.4 under the relevant conditions of B1.3.3 relating to structure. Durability meets performance requirements of NZBC clause B2.3.1(a) for 50 years provided the material is not subject to solvents or physical damage.

Note: Form Flow panel will assist the drainage of the backfill. However for stability, drainage material of adequate strength and permeability must be used behind the Form Flow panel; ideally sand or gravel material. Where there is doubt



about the suitability of the excavated material for use as a backfill, technical advice must be sought.

## GEOTECHNICAL APPRAISAL TEST RESULTS: FORM FLOW (JULY 1998)

Test Standard (if applicable)		Test Result
Property Density	ASTM D 1622-93: Standard Test Method for Apparent Density of Rigid Cellular Plastics	12.2kg/m <sup>3</sup>
Compressive Strength	ASTM D 1621-94: Standard test Strength Method for Compressive Properties of Rigid Cellular Plastics	26.8kPa
Permeability	10.21/M <sup>2</sup> at 240mm constant head Equivalent to sand (uncompressed) 7.41/M <sup>2</sup> at 290mm and sand-gravel constant head (compressed)	Equivalent to sand and sand-gravel mixtures
Creep	Refer to full Opus appraisal no.2002/01	

Test Data:		
Constant Head Test Data (150mm diameter test specimens):		
Parameter	Specimen Condition	
	Uncompressed	Compressed
Head (mm)	240	290
Thickness (mm)	100	60
Flow rate (litres/second per m <sup>2</sup> )	10.2	7.4
Permittivity (second <sup>-1</sup> )	0.04	0.03

**Comments:** Test results indicate that the product is suitable for use as a protective barrier and drainage medium behind retaining walls. Where backfill other than free draining granular material is used, appropriate consideration to strength, expansion/shrinkage and drainage of the backfill material is required.

**Max. Wall Height:** 5 metres ~ 1 panel thick. 5 metres plus ~ 2 panel thickness required to provide adequate resistance to compression loads.

**Chemical resistance:** Resistant to most aqueous media, including dilute acids, alkalis, methanol, ethanol and silicon oils. Not resistant to hydrocarbon based solvents such as petrol, diesel, kerosene and white spirits. Do not place Form~Flow in contact with solvent which may damage it.

**Durability:** 50 years, Form~Flow will not rot and is highly resistant to mildew & bacteria.

**Hazardous Building Materials:** Form~Flow does not present any health hazard during installation or in the serviceable life of the building in which it is used. Form~Flow does not irritate the skin and is nonallergenic.

**Fire Hazard:** Form~Flow contains flame retardant conforming to AS1366, part 3-1992.



...polystyrene solutions that add value!

### Styrobeck Plastics Limited

139 Roscommon Road,  
PO Box 76 894  
Manukau City, New Zealand  
Tel: 64 9 278 7175  
Email: sales@styrobeck.co.nz

64 Pharazyn Street, Lower Hutt  
Tel: 64 4 586 0254  
Email: sales@styrobeck.co.nz

Call free 0800 262 466  
or visit [www.styrobeck.co.nz](http://www.styrobeck.co.nz)