

Flexcell

bitumen impregnated expansion joint filler

An introduction to Flexcell

Concrete expands and contracts according to temperature changes, and therefore some type of filler is needed between slabwork to keep the concrete from buckling when it expands, and to fill the resultant gaps when the concrete contracts. Expansion (movement) joints may be used between the slabs, and also to separate the slabs from structures, thereby preventing damage which may occur during these expansion and contraction cycles.

Flexcell is a bitumen impregnated wood fibre board, which is ideal for use as an expansion joint filler. It offers excellent compressive and recovery properties, is simple to handle and install and is available in a range of sizes to suit most highway and civil engineering requirements, including roads, bridges, car parks, airports and brick walls.

Features and benefits

- Resilient – the unique composition of Flexcell permits it to compress 50% of its thickness without extruding, and to recover to a minimum of 70% of its original thickness.
- Durability – proven long lasting product
- Weather resistant – the bitumen impregnated wood fibre provide low water absorption and will not become brittle in cold weather. Tests show no damage due to freezing or thawing.
- Excellent bond – the textures surface provides an excellent interface with poured concrete, so it resists working loose during concrete expansion and contraction.



Identification

Bitumen impregnated insulating board (as described in BS 1142) for use as an expansion joint filler.

Composition and manufacture

Made from hard and soft wood fibres with approximately 12.5% bitumen content.

Standards and authority

Tested to BS 1142: 1989.

Department of Transport specification for highway works, Part 3, Series 1000, Clause 1015.

Dry density

Typical dry density for all thicknesses is approximately 275 kg/m³.

Bending strength?

Copy here

Typical applications

Copy here

Standard sizes

Flexcell is available in a range of standard sizes and thicknesses as shown below:

Cut size	Thicknesses (mm)	Pieces per pack	No. of pieces per 1220 · 2440 sheet	No. of 1220·2440 sheets per pallet
75 · 2440	10	10	15	110
	12	10	15	90
	20	10	15	55
	25	10	15	44
100 · 2440	10	10	11	110
	12	10	11	90
	20	10	11	55
	25	10	11	44
125 · 2440	10	10	9	110
	12	10	9	90
	20	10	9	55
	25	10	9	44
150 · 2440	10	10	7	110
	12	10	7	90
	20	10	7	55
	25	10	7	44
175 · 2440	10	10	6	110
	12	10	6	90
	20	10	6	55
	25	10	6	44
200 · 2440	10	10	5	110
	12	10	5	90
	20	10	5	55
	25	10	5	44

Compression to 50% thickness in the initial state

Thicknesses	Specific weight (kg/m ³)	Load (N/mm ²)	Recovery (%)	Mass loss (%)
19	275	>2	82	<1
20	295	>2	80	<1
20	290	>2	80	<1

Weathering and compression to 50% thickness

Thicknesses	Specific weight (kg/m ³)	Load (N/mm ²)	Recovery (%)	Extrusion (%)
19	275	>2	70	0.50
20	295	>2	72	0.50
20	290	>2	71	0.50