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a.b.e.® Construction Chemicals

dura.®cord & dura.®sheet

CLOSED CELL POLYETHYLENE JOINT FORMERS & BACK UP MATERIAL

DESCRIPTION

dura.®cord and **dura.®sheet** are manufactured from low density, closed cell expanded polyethylene. They are highly flexible and compressible, with excellent recovery properties and tensile strength.

dura.®cord: back up material is supplied in various diameters.

dura.®sheet: permanent, preformed bond breaker and joint former.

USES

dura.®cord and **dura.®sheet** are semi-rigid joint fillers used for forming expansion joints or as a backing material for joints in:

- Concrete
- Brickwork
- Blockwork
- Retaining walls
- Deck slabs
- Reservoirs
- Paving
- Columns

dura.®sheet 100 is suitable for use in water retaining structures and conforms to the requirements of **a.b.e.® Construction Chemicals'** specifications for the sealing of water retaining structures.

ADVANTAGES

- Rot proof
- Fine closed cell structure
- Non-absorbent
- Resilient
- Low load transfer
- Bitumen free
- Non-tainting
- Ozone friendly and recyclable
- Good thermal properties

INSTALLATION

dura.®cord should be compressed into the joint to approximately 70% of its original size. Where hydrostatic pressures are present, compression should be to approximately 40% of its original size.

For most effective results, **dura.®cord** must be inserted into the joint to a depth that will accommodate the depth of sealant specified i.e. joints from 6 mm to 12 mm wide, width and depth must be equal. From 12 mm wide to 24 mm wide the depth should be 12 mm, and for joints over 24 mm wide the depth should be half width.

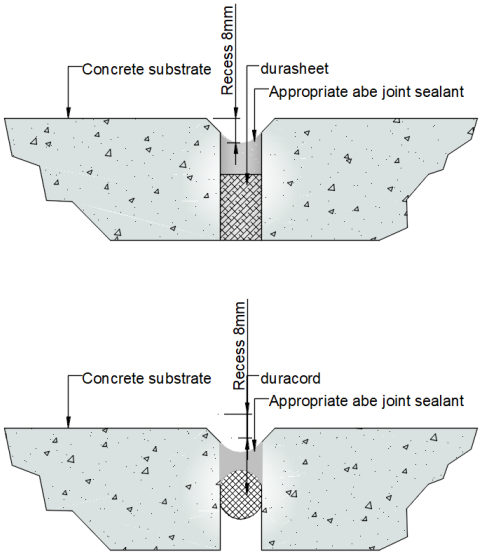
In order to prevent movement of the **dura.®sheet** when installing in expansion joints between suspended slabs use partly projecting copper nails or daubs of adhesive.

When forming expansion joints with **dura.®sheet** in in-situ concrete joint sealing slots can be formed by first cutting through the **dura.®sheet** to the required depth and pinning the strip back on to the remaining **dura.®sheet** with 50 mm panel pins installing the filler flush with the concrete surface. Prior to sealing remove the top strip to provide a clean joint ready for preparation of the joint sealant installation.

Bond breakers are not required as elastomeric sealants will not bond to the **dura.®cord** and closed cell side of **dura.®sheet.** A pvc tape should be applied to top of **dura.®sheet** to avoid adhesion of sealant to open cell structure.

DESIGN CRITERIA

Typical movement joint



Typical Expansion Joint Detail

TECHNICAL DATA				
TYPICAL PROPERTIES				
dura.®sheet	**Unit**	**40**	**Test**	**100**
Nominal Density	kg/m³	43	ISO 845:2006	241
Compression set	%	49,5	ISO 1856:2000	32,4
Tensile strength @ peak	kPa	396	ISO 1798:2008	1199
Tensile elongation	%	70,4	ISO 1798:2008	57,4
Colour		Blue		Black
Service temperature			-40 °C to +90 °C	
Chemical resistance	Resistant to acids and alkalis. Good resistance to oils, petrol, diesel fuel and solvents			
Toxicity	Non-toxic (inert) and has no rodent attraction			
Flexibility	Good to -40 °C			
Composition	Closed cell expanded polyethylene			

MODEL SPECIFICATION

dura.®cord

Closed-cell polyethylene backing cord for filling and dimensioning joints prior to sealing with an appropriate flexible sealant.

The backing cord will be **dura.®cord**, a closed-cell polyethylene backing cord applied in accordance with the recommendations of **a.b.e.® Construction Chemicals**

dura.®sheet 40

Non-absorbent, closed-cell polyethylene joint filler. Used as an expansion joint former for paving, pooldecks, between columns and brickwork, walls and floors in in-situ cast concrete not subject to hydrostatic pressures.

dura.®sheet 100

Non-absorbent, closed-cell polyethylene joint filler. Used as an expansion joint former for reservoirs, water retention works and sewage works.

PACKAGING

dura.®cord is supplied in 100 metre continuous rolls in various diameters from 6 mm to 50 mm.

dura.®sheet is supplied rectangular sections of 1.2 m x 2.4 m in various thicknesses from 6 mm to 50 mm. Where continuous lengths are required, the supplied lengths are easily joined using a good neoprene contact adhesive.

HANDLING & STORAGE

This product has a shelf life of 12 months if kept in a dry cool place in the original packaging. In more extreme conditions this period might be shortened.

HEALTH & SAFETY

In the event of a fire care should be taken not to inhale the fumes of burning **dura.®cord** or **dura.®sheet**.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot - because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied - accept any liability either directly or indirectly arising from the use of **a.b.e.®** products, whether or not in accordance with any advice, specification, recommendation or information given by the company.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements.

a.b.e.® Construction Chemicals has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in building and construction technology.

DATE UPDATED: 19/07/18