



Kirk Sandall Industrial Estate, Doncaster, South  
Yorkshire, DN3 1QR

+44 (0)1302 310 113  
enquiries@prosolveproducts.com  
www. prosolveproducts.com

ProSolve is trademark of S.T.L Trading Company  
Limited  
Reg in England No: 5230722  
VAT Reg No: 381 3533 58

## DATA SHEET

### **BITUMEN JOINTING STRIP – SUSTAINABILITY AND RECYCLING**

#### **PROSOLVE BITUMEN JOINTING STRIP (PVBJS40, PVBJS60, PVBJS80, PVBJS120)**

ProSolve Bitumen Jointing Strip is a user friendly, high performance joint sealant that provides a watertight and flexible seal. ProSolve Bitumen Jointing Strip is used to joint precast concrete box culverts, manholes, inspection chambers, shafts, caissons, tunnels and ogee pipes.

#### **PROSOLVE BITUMEN JOINTING STRIP POLYMER MODIFIED BITUMINOUS JOINT SEALANT**

ProSolve Bitumen Jointing Strip is a polymer modified bituminous compound incorporating temperature extenders.

ProSolve Bitumen Jointing Strip is made in various cross-sections designed to seal all types and sizes of joints in precast concrete manholes, box culverts, inspection chambers, pipes etc. Plastoelastic properties and high adhesion provide a permanent watertight seal during and after settlement, ground movements, side loadings etc.

ProSolve Bitumen Jointing Strip is resistant to sulphates, acids, alkalis, salts, groundwater, trade effluent, grease, sewage and micro-organism.

ProSolve Bitumen Jointing Strip enables the contractor to install watertight culverts, manholes and other precast concrete structures quickly and economically without the need for in situ concrete surrounds while still meeting full life cycle durability requirements. ProSolve Bitumen Jointing Strip is supplied in rolls with siliconized release plastic.

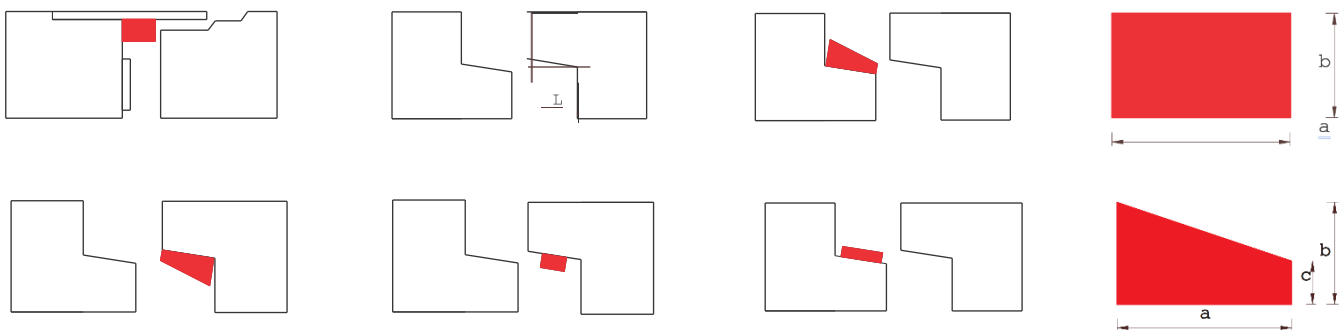
ProSolve Bitumen Jointing Strip is created after many years of research and development work made together with leading precast concrete manufacturers. ProSolve Bitumen Jointing Strip has been tested in applicable parts based on standards like DIN 4062 and functional needs. Also tests are carried out by concrete manufacturers showing that ProSolve Bitumen Jointing Strip meets the requirements of EN 1917 (new European standard for concrete manholes and joints.) This enables the concrete manufacturer to supply units that meet the new standard.

## PROPERTIES

Composition	polymer modified bituminous incorporating temperature extenders, elastomer and mineral powder
Specific gravity	1.46 g/cm <sup>3</sup> at 25°C
Specific volume	685 cm <sup>3</sup> /kg
Colour	black
Temperature range	application -5° to +40°C
Water tightness	minimum 0.5 bar / 15 mins at 20°C, tested to 5.0 bar/15 mins at 20°C
Water absorption	0.03% (DIN 4062)
Chemical resistance	very good (acids and alkalis pH 2 to 12)
Microbiological	excellent

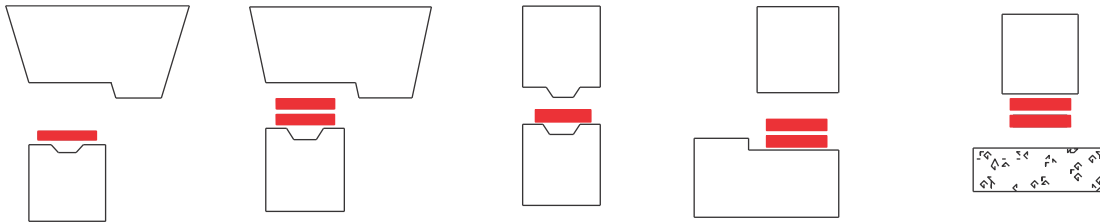
## BOX CULVERTS JOINTS

Socket Nib Length x offset L x 0 mm	Cross-section a x b x c/axb mm	Cross - section area sq mm	Reels per carton no. x length	Metres per carton (m)	Approx carton weight (Kg)	Length per 1 litre primer (L)	Primer req'd per carton
<b>Trapezoidal ProSolve Bitumen Jointing Strip</b>							
70 x 7	70 x 32 x 14	1610	3 x 3m	9	22	17	0.5
70 x 10	80 x 32 x 14	1840	3 x 3m	9	25	15	0.6
75 x 9	80 x 32 x 14	1840	3 x 3m	9	25	15	0.6
75 x 10	80 x 32 x 14	1840	3 x 3m	9	25	15	0.6
<b>Rectangular ProSolve Bitumen Jointing Strip</b>							
70 x 7	30 x 22	660	7 x 3.5m	24.5	25	20	1.2
70 x 10	40 x 25	1000	5 x 3m	15	23	20	0.8
75 x 9	40 x 25	1000	5 x 3m	15	23	20	0.8



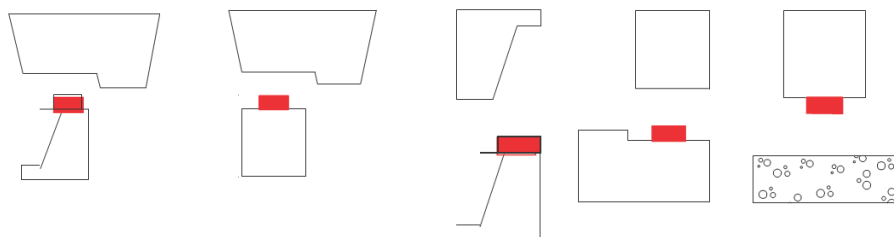
## MANHOLES WITH TONGUED AND GROOVED JOINTS

Manhole Diameter DN	Cross-section a x b mm	Length per joint m	Reels per carton no. x length	Metres per carton (m)	Approx ctn. wt (kg)	Length per 1 litre primer (m)	Primer req'd per carton (L)
900	60 x 12	3.1	4 x 6m	24	27	26	0.9
1050	60 x 12	3.6	4 x 6m	24	27	23	1.0
1200	80 x 12	4.1	3 x 6m	18	27	21	0.9
1350	80 x 12	4.6	3 x 6m	18	27	19	0.9
1500	80 x 12	5.1	3 x 6m	18	27	18	1.0
1800	80 x 12	6.1	3 x 6m	18	27	17	1.1
2100	120 x 12	7.0	2 x 6m	12	27	14	0.9
2400	120 x 12	8.0	2 x 6m	12	27	13	0.9
2700	120 x 12	9.0	2 x 6m	12	27	12	1.0
3000	120 x 12	10.0	2 x 6m	12	27	11	1.1



## MANHOLES WITH REBATED OR OGEE JOINTS

Manhole Diameter DN	Cross-section a x b mm	Length per joint m	Reels per carton no. x length	Metres per carton (m)	Approx ctn. wt (kg)	Length per 1 litre primer (m)	Primer req'd per carton (L)
900	25 x 20	3.1	8 x 4m	32	25	50	0.6
1050	25 x 20	3.6	8 x 4m	32	25	42	0.8
1200	30 x 22	4.1	7 x 3.5m	24.5	25	38	0.6
1350	30 x 22	4.6	7 x 3.5m	24.5	25	36	0.7
1500	30 x 22	5.1	7 x 3.5m	24.5	25	33	0.7
1800	30 x 22	6.1	7 x 3.5m	24.5	25	31	0.8
2100	40 x 25	7.0	5 x 3m	15	23	26	0.6
2400	40 x 25	8.0	5 x 3m	15	23	24	0.6
2700	40 x 25	9.0	5 x 3m	15	23	23	0.7
3000	40 x 25	10.0	5 x 3m	15	23	21	0.7



## **PROSOLVE BITUMEN JOINTING STRIP APPLICATION**

### **PRIMING**

All joint faces must be clean and dry and any loose material must be removed. Possible surface moisture should be removed with a blow-torch. Then ProSolve Bitumen Jointing Strip Primer is brushed onto both sides of the joint. (Avoid the caulking groove present on some culverts). Primer is allowed to dry before starting the ProSolve Bitumen Jointing Strip installation. Non-disposable brushes can be cleaned in white spirit.

### **APPLICATION**

After the primer has dried apply ProSolve Bitumen Jointing Strip within 8 hours, ensuring that all joint faces are clean and dry. It may be necessary to warm ProSolve Bitumen Jointing Strip with a blow-torch to increase tack.

Apply ProSolve Bitumen Jointing Strip of the correct size to the joint, as shown in the drawings page 2, taking care to discard the interleaving paper.

On box culverts and ogee pipes heat the surface of the ProSolve Bitumen Jointing Strip with the flame of a gas torch to obtain initial adhesion if needed. Don't heat more than to get the surface glossy.

### **POSITIONING OF PROSOLVE BITUMEN JOINTING STRIP**

On box culverts position the trapezoidal section of ProSolve Bitumen Jointing Strip to cover the sloping face of the socket. The traditional rectangular cross-sections which are smaller and should be positioned on the middle of the sloping face of the socket.

On ogee pipes position the ProSolve Bitumen Jointing Strip on the sloping face of the spigot.

### **JOINING PROSOLVE BITUMEN JOINTING STRIP**

On manholes, box culverts and ogee pipes join the ends of the strip in a scarf joint by overlapping the ends then cutting through at 45° with a hot knife, playing a flame on the cut faces and smoothing over.

On box culverts cut the strip into the corners with a mitre joint.

### **MANHOLES AND INSPECTION CHAMBERS**

On manholes with tongued and grooved joints of DN 1350 to 3000, use a double strip on the base and top joints. On all manholes and inspection chambers trim off any excess compound which extrudes internally.

On manholes the imposed loading from the upper units should be sufficient to compress the ProSolve Bitumen Jointing Strip. Ensure that the ProSolve Bitumen Jointing Strip is compressed by at least half its thickness before any water test.

### **BOX CULVERTS AND OGEE PIPES**

On box culverts and ogee pipes close the joint to an internal gap of 10 mm using a mechanical cable puller. The trapezoidal (wedge shaped) ProSolve Bitumen Jointing Strip will fill the joint in the middle and inside on box culverts and in the middle and outside on ogee pipes. Any squeeze-out should be cut off and smoothed flush to the wall or the back of the caulking groove if there is a secondary sealant.

### **LEAKAGE**

If a joint should leak, check for the absence of primer, gaps between the ends of the strips or poor fit between the concrete units.

## **IMPORTANT NOTICE**

**All statements, technical information and recommendations are based on tests we believe to be reliable as at the date of hereof, but the accuracy or completeness thereof is not guaranteed. Please ensure before using the product that it is suitable for your intended use. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, other than for fraudulent misrepresentation, ProSolve expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.**

**BEFORE USE, CONSULT THE SAFETY DATA SHEET OF THE PRODUCT.**