

MORSUN MORTOFLEX DS-600 POLYSULFIDE SEALANT

PRODUCT CODE

MCS-SC-501

PRODUCT DESCRIPTION

1. Mortoflex DS-600 is a two-part sealant based on liquid Polysulfide polymer. 2. Pouring grade is a pourable version designed for use in horizontal joints. 3. Forms a tough elastic rubber-like seal. 4. Accommodates continuous and pronounced cyclic movement. 5. Excellent adhesion to most common substrates. 6. High resistance to aging influences, physical damage and climatic extremes

SUGGESTED USES

Sealing joints in: 1. Building superstructures. 2. Roofs of sheet metal and concrete. 3. External walls and cladding, especially on high-rise building and places where premature failure and frequent maintenance is to be avoided. 4. Glazing frames windows and in curtain walls. 5. Joints in ceiling, especially structural expansion joints running through the ceiling. 6. Subways. 7. Basements and retaining walls. 8. Concrete floors where movements, load displacement and chemical resistance is expected. 9. Water retaining structures such as reservoirs, dams, canals, culverts and water treatment works

TECHNICAL DATA

Grade	Gun Grade / Pouring Grade Two Part Polysulfide Sealant
Specification Compliance	British standard BS: 4254, U.S. Federal Specification TT-S-0027E
Joints Size	Mortoflex DS-600 may be applied to joints with 5 to 50 mm width. Joints which are expected to experience cyclic movements should be designed in such a way that the optimum width to depth ratio of 2:1 is available for sealing the joint subject to the over-riding recommended minimum sealant depths set out below: 5 mm for metals, glass and other non-porous surfaces. 10 mm for all porous surfaces. 20 mm for traffic joints and those subject to hydrostatic pressures.
Application: Joint Preparation	The joint surfaces must be thoroughly dry; clean and frost free. Remove all rust scale and protective lacquers from metal surfaces. Remove any oil / grease with joint cleaner. Expansion joint filler must be checked to ensure it is tightly packed with the width of the backup material / backer rod approximately 15% higher than the joint width and no gaps or voids exist at the base of the sealing slot, before positioning a bond breaker. For construction or contraction joints a bond breaker or back up tape should be used to ensure that sealant does not adhere to the backup material. Where hydrostatic pressure exists, only bond breaking tapes must be used and not foaming back-up strips. Where a particularly neat finish is required, mask the face edges of the joints before priming and remove immediately after tooling is completed.
Primer Requirements	Primer DS-101 on porous surfaces and DS-201 on non-porous surfaces.
Primer DS-101	A porous surface primer for polysulfide sealant. It is a two part chemically active clear liquid for brush application, supplied in 500 ml. Tins. Primer DS-101 should be used on concrete, stone, brickwork, timber and unglazed edges of ceramic tiles. One thin coat should be applied and allowed to dry until tack free before sealing (normally 20 minutes to 3 hour.) Excessively porous surfaces may need more than one coat. Using a clean dry brush, ensure complete coverage, but avoid over priming resulting in an excess of primer in the base of the joint or application beyond the joint faces. The mixed Mortoflex DS-600 must be applied when the primer is still tacky, that is after the evaporation of the solvent but before the primer film has completely reacted. After 3 hours the surfaces must be re-primed before applying the sealant.
Primer DS-201	A primer for use on non-porous surfaces such as glass and ceramics, on external surfaces or even where these surfaces are submerged in water. It is two-part chemically active clear liquid for brush or pad application, supplied in 250 ml. Tins. Iron and steel must be protected with an anticorrosion primer to sealing.
Mixing	Ensure no thinner is added to the sealant while or after mixing.

TECHNICAL DATA	
Mortoflex DS-600 Gun Grade	Both the base component and curing agent are supplied ready for mixing. Mix thoroughly using a slow speed drill (300-500 rpm) fitted with a Paddle stirrer for a full 5 minutes or with hand spatula. Mortoflex DS-600 mixes more easily if stored overnight at room temperature. Immediately after mixing, load the sealant into gun by means of gun filing device and apply to the joint. Alternatively it can be applied with hand spatula. Apply with gun or spatula.
Mortoflex DS-600 Pouring Grade	Is supplied in two separate containers. The small container contents should be poured into the other tin, and mixed as per the gun grade instructions. The pouring grade may be poured directly into horizontal joints or loaded into the gun for application to horizontal joints less than 15 mm wide.
Finishing	Mortoflex DS-600 should be tooled to a smooth finish. A minimum of surface lubricant such as dilute detergent solution or white spirit may be used to assist the process. Any masking tape should be removed immediately after tooling. Normally, joints in Mortoflex DS-600 will be flush and unpainted. If required, the sealant may be painted with any conventional decorative paint.
Maintenance	Nothing special, damage should be repaired if and when it occurs.
Cleaning Equipment	Clean equipment immediately after use with equipment Cleaner.
Storage	Store in cool, dry conditions in original tightly sealed containers.
Water Immersion	Mortoflex DS-600 must be fully cured before permanent immersion in water
Hardness Shore A 25 C	Gun grade: Grey 20 to 25. Pouring grade: 18 to 25
Chemical Resistance to Occasional Spillage	Dilute acids - resistant. Dilute alkalis - resistant. Petrol - resistant. Aviation fuels - resistant. Diesel fuel - resistant. Kerosene - resistant. Lubricating oils - resistant. White spirit - resistant. Chlorinated solvents - not resistant. Aromatic Solvents - not resistant. Dilute oxidizing acids - not resistant
Biological Resistance	MORTOFLEX DS-600 has been evaluated in micro-biologically active situations and has been shown to have resistance to aerobic conditions.
Movement Accommodation Factor (MAF)	25% butt joint, 50% lap joint (see also under Joint Size)
Mixing Ratio	Base : Accelerator 92 : 8 (By Weight)
Base	Thick white Paste
Accelerator	Thick, Dark Brown Paste
Specific Gravity	1.55 + 0.05/kg
Set Time	24 hours @ 30 C
Curing Time	7 days @ 30 C
Shrinkage	Negligible
Corrosion on Metal	Nil
Water Resistance	Very good
Gas & Water Vapour Permeability	Impermeable

GUIDE TO MORTOFLEX DS-600 QUANTITIES

Joint size (mm)	Litres per metre run	Metre run per 4 litre pack
5 x 5	0.025	100.00
5 x 10	0.050	50.00
10 x 5	0.050	50.00
10 x 10	0.100	25.00
20 x 10	0.200	12.50
20 x 15	0.300	8.30
20 x 20	0.400	6.20
40 x 20	0.800	3.10
40 x 25	1.000	2.50
40 x 30	1.200	2.00
40 x 40	1.600	1.50
50 x 25	1.250	2.00
50 x 30	1.500	1.60
50 x 40	2.000	1.25
50 x 50	2.500	1.00

Disclaimer: The information provided herein is derived from the best available sources and is given in good faith. As conditions of use are beyond our control, the Company gives no warranty, expressed or implied, and assumes no liability in connection with any use of this information.