

# DUROSEAL HYBRID 40

ADVANCED ONE COMPONENT  
POLYURETHANE SEALANT-MEDIUM MODULUS



## DESCRIPTION

DUROSEAL HYBRID 40 is a one component advanced polymer system, gun - grade, Non - sag, moisture - cure advanced Polymer Sealant designed to skin and cure rapidly. This high performance product is designed with outstanding UV resistance and long term durability.

## FEATURES

- Paintable
- Movement accommodation factor  $\pm$  30%
- Excellent adhesion without priming
- Highly resistant to sea water, diluted acids and alkalis.
- Odour less UV Resistant/ Fast Curing
- Low VOC

## USES

- Sealant is designed to seal construction joints.
- To seal waterproof rivet seams and roof rails.
- To seal Perimeter joints around windows and doors.
- Sealing corner moldings, fabricated roof-lap seams, bumper assemblies and body-to-cab joints In motor homes.
- Sealing door hinges, skylights and portholes.  
Sealing Air conditioning equipment, flashing and gutters.

## ADVANTAGES

- Accommodates 30% joint movement Permanently flexible, excellent weather ability Easy to gun - Easy to tool Cures to a tough, durable, elastic.
- Paintable - non-sticky after cure
- Single component & Convenient Packing

## TECHNICAL INFORMATION

TECHNICAL SPECIFICATION	TEST METHOD	TYPICAL VALUE
Skin Over Time, mins.	-	10 - 18
Tack Free Time, mins.	ASTM C-679-87	>30
Flow (sag or slump)	ASTM C-639-01	Non Sag
Hardness: Shore A	ASTM D-2240-97	25 - 30
Specific gravity	ASTM D-1475	1.42 +0.02
Depth cure,mm/ day@RT	-	>2

## PACKAGING

300 ml cartridges, 24 cartridges per carton 400ml , sausage and 600 sausage, 20 sausages per carton

## COLOURS

White, Off- white, Grey, and Black. For other colour colour please contact local Durotech representative



## EXPANSION JOINT DESIGN

Duroseal Hybrid 40 may be used in any joint designed in accordance with accepted architectural/ engineering practices. Joint width should be at least 4 times anticipated movement, and not less than (5mm).

While applied on an expansion joint the depth (D) of the sealant should be equal to the width (W) of the joints that are less than 10mm wide. For wider joints, width to depth ratio should be 2: 1.

The maximum width of the joint on which Duroseal Hybrid 40 can be applied is 25mm.

## STORAGE AND SHELF LIFE

Store away from all sources of heat and sunlight. In unopened conditions and if stored in proposed conditions, the shelf life of DUROSEAL HYBRID 40 is up to 12 months.

## JOINT BACKING

Closed cell polyethylene backer rod is recommended as joint backing to control sealant depth and to ensure intimate contact of sealant with joint walls when tooling. Where depth of joint is insufficient for the use of backer rod, an adhesive backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should bedry time of sealant application.

## JOINT BACKING

The following formula is an approximate guideline to calculate foreseen yield for a standard 600ml sausage of Duroseal Hybrid 40.

$$L = 600 / (W \times D)$$

Where: L = Length of sealant in meters obtained per cartridge.

D = Depth of the joint in mm W = Width of the joint in mm

Joint Depth(mm)	Joint Width(mm)					
6	6	10	12	15	20	25
6	16.6					
8	7.5		6.2	5		
10	6		5	4	3	
2					2.5	1.9
15						1.6

## SUBSTRATE PREPARATION

Surfaces must be sound, clean, and dry. All release agents, dust, loose mortar, laitance, paints, or other loose particles must be removed. This can be accomplished with a thorough wire brushing, sanding, or solvent washing, depending on the contamination. Durotech recommends that surface temperatures be below 40°C at the time the sealant is applied.

## PRIMING

DUROSEAL HYBRID 40 typically adheres to common construction substrates without primers; however, due to the variability of substrate finishes available, where deemed necessary, use Durotech Prime PA mockup or field adhesion test can be performed on the actual materials being used on the job to verify the need for a primer.

## APPLICATION

DUROSEAL HYBRID 40 is easy to apply with conventional caulking equipment. Ensure that the backer rod is friction fitted properly. Mask the sides of the joint with tape prior to filling for a cleaner finish. Fill the joint completely with a proper width-to-depth ratio and tool to ensure intimate contact of sealant with joint walls. Dry tooling is always preferred, although xylene can be used in limited amounts to slick the spatula if needed

## CLEAN UP

Excess sealant and smears adjacent to the joint interface can be carefully removed with xylene or mineral spirits before the sealant cures. Any utensils used for tooling can also be cleaned with xylene or mineral spirits.

## FOR OPTIMUM PERFORMANCE

In cool or cold weather, store container at room temperature for at least 24 hours before using.

Pursuant to accepted industry standards and practices, using rigid paints and/or coatings over flexible sealants can result in a loss of adhesion of the applied paint and/or coating, due to the potential movement of the sealant however, should painting and/or coating be desired it is required that the applicator of the paint and/or coating conduct on-site testing to determine compatibility and adhesion.

Proper application is the responsibility of the user. Field visits by Durotech personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

## LIMITATIONS

- Do not apply over damp or contaminated surfaces.
- Do not use DUROSEAL HYBRID 40 as a structural (load -transferring) sealant.

## STORAGE AND SHELF LIFE

DUROSEAL HYBRID 40 has a shelf life of 12 months when stored in tightly closed original casks, in a dry place at a temperature between +5°C and +25°C

## CURING TIME

DUROSEAL HYBRID 40 generally cures at a rate of 2 mm per day at 25°C and 50% relative humidity. DUROSEAL HYBRID 40 skin in 15 -20 minutes and be tack-free in > 30minutes. Lower temperatures and humidity will extend curing time.

## HEALTH AND SAFETY

Use only with adequate ventilation. Prevent contact with skin, eyes and clothing. Wash thoroughly after handling. Avoid breathing vapors. DO NOT take internally. Use impervious gloves, eye protection if the TLV is exceeded or used in a poorly ventilated area. Always utilize the accompanying MSDS for information on personal protective Equipment (PPE) and health Hazards.

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## DUROTECH INDUSTRIES



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