



## MASTER PROOFER S338

### One Component Low Modulus Polyurethane Sealant

單組份低彈性模量聚胺脂密封膠

#### 1.0 Description

MASTER PROOFER S338 is a professional grade one component Low Modulus Polyurethane Sealant which is manufactured to stringent the specification of Master Proofer Company Ltd. MASTER PROOFER S338 is designed to meet with high performance, long durability and waterproofing sealing requirement for most kind of joints.

#### 2.0 Technical Data

se Polymer	Thixotropic Polyurethane
Storage Condition	Keep dry between 5°C&30°C
Shelf Life	12 months @ 25°C
Durometre Hardness(Shore 'A')	25 DIN 53 505
Application Temperature	5° C to 40°C
Service Temperature	-20°C to 80°C
Tooling Time @23°C 50% RH	within 12 min.
Skimming	30 to 120 min
Cure Time @23°C 50%RH (3.15mm Thickness)	24 hours
Average Life Expectancy	> 15 years
Resistance to Water	Excellent
Resistance to Chemicals	Excellent for dilute acids and alkalis (but not continuous immersion in chlorinated water)
Resistance to UV	Excellent
Flammability	Does not support combustion
Standards Compliance	ISO 11600(2000) Class F25 on anodized aluminum and mortar Performance requirement on BS5889 part A, BS1802, BS4254, BS6093 BS6213
Colour	Standard Stock - White, Black, Grey other colour are subject to request
Dynamic Movement Capability	+ 35%
Modulus of elasticity (at 100 %)	0.25 Mpa ISO 8339
Elongation at Break	250% ISO 8339

#### 3.0 Typical Application

Precast facade units, construction/expansion joints, aluminum/stone wall claddings, pavement, perimeter seal of door and window etc.

#### 4.0 Preparation

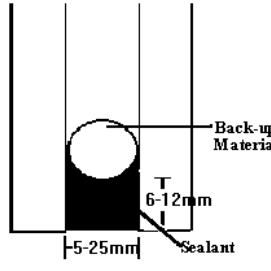
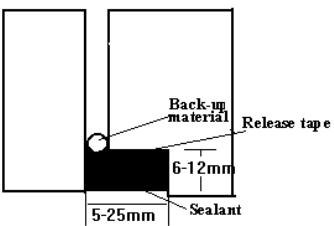
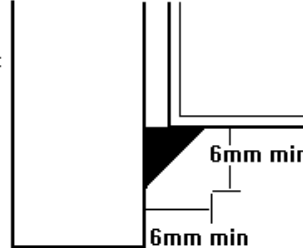
All surfaces should be sound, clean, dry, free of dust, oil, grease or other contamination. Loose matter should be removed by abrasion if necessary finally removing the dust by brush. oil and grease are removed by the use of a cloth moistened with xylene or approved solvent. The cleaning cloth should be replaced regularly to avoid the redistribution of the contaminates over the surface. Care should be taken to ensure that all protecting films and laquers etc is removed prior to the application of the sealant. Masking tape may be used to ensure a neat edge to the seal and protect substrates from which the removal of sealant is difficult. It should be applied before priming and be removed immediately after tooling, before the sealant starts to cure. A suitable back-up material (approximately 30% oversize) should be placed into the joint to the required depth-see **Joint design**. Closed cell polyethylene foam is normally used as it also acts as a bond-breaker, ensuring that the sealant bonds only to the sides of the joint.

#### 5.0 Cleaning tools and equipment

Tools can be cleaned using xylene, white spirit or similar solvent.

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**6.0 Joint Design**

<p><b>Joint Design Diagram A</b></p> <p>Laboratory tests show that in butt joints an optimum performance is achieved when: Width : Depth = 2 : 1</p> <p>Wide joints may require more applications, allowing the sealant to cure slightly between application.</p> 	<p><b>Joint Design Diagram B</b></p> <p>If the joint is not deep enough to accommodate the foam backing strip, a self - adhesive polyethylene tape should be need to ensure that the sealant bonds only to the side of the joint.</p> 
<p><b>Joint Design Diagram C</b></p> <p>When used as a triangular fillet there should be at least 6mm cover on each substrate and the fillet should be a regular triangle in cross section.</p> 	<p>Master Proofer S338 can be painted, but in common with other sealant, if significant movement occurs, the paint film will craze to the long-term detriment of the sealant. Note when the width depth ratio is altered the movement accommodation factor is lowered and allowance must be made in the calculation of the joint width.</p>

**7.0 Application**

Before starting application ensure that any primer or cleaner has dried fully. Using MPGun A910 or similar, extrude the sealant into the base of the joint and ensure that complete contact is made with the substrates. Care should be taken to avoid trapping air within the sealant. Select a tool to suit the width of the joint and wet it with clean water containing a little detergent. Working upwards in case of vertical joints, lightly tool the sealant into the joint. This will improve adhesion, reduce air content and end enhance the appearance of the finished joint. If masking tape was used, it should be carefully removed, ensuring that it is not dragged across the face of the joint.

**8.0 Coverage**

The following formula gives the quantity of sachets required:

$$\frac{\text{Joint width x depth (mm}^2\text{) x Length (M)}}{600} = \text{No. of sachets}$$

**9.0 Health and Safety**

MASTER PROOFER S338 can be considered to be free from significant dangers in normal use provided that usual precaution. If eyes are contaminated wash with plenty of clean water and seek medical advice. For further information, consult relevant Material Safety Data Sheet.

**10.0 Technical Service**

The Marketing and Technical offices of Master Proofer Company Ltd are readily available for advice on any of the Company's Products.

**11.0 Packaging**

MASTER PROOFER S338 is available in 600ml sachet.



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#### 產品簡介

萬寶牌 S338 為一種專業工程用聚胺脂密封膠。它是依萬寶建築化工特殊規格生產，具備優良黏附力及彈性模量的密封膠，持久力特長，極低氣味，用法簡單，無色素沾污。

#### 技術資料

基礎聚合物成份(Base Polymer)	趨流性聚胺脂(Thixotropic polyurethane)
儲存環境(Storage Conditions)	須存於乾爽及保持在攝氏 5° 至 25° 之間
存貨有效期(Shelf Life)	12 個月
硬度(Hardness, Shore 'A' Scale)	25 德國標準 53 505
有效施工環境溫度(Application Temperature)	攝氏 5 至 35
凝固膠體溫度承受限度(Service Temperature)	攝氏 -20 至 80
攝氏 23 及相對濕度 50% 下凝固速度(Cure Time)	2mm/24 小時
估計凝固膠體平均壽命(Average Life Expected)	超過 15 年
抗水侵蝕能力(Resistance to Water)	良好(但不適宜長期浸於高氯氣成份水質如泳池等)
抗化學物侵蝕能力(Resistance to Chemicals)	抗弱性酸、鹼、酒精及脂肪族碳氫化合物
可燃性(Flammability)	非助燃類別
抗紫外線老化能力(UV Resistance)	極高
符合規格(Standards Compliance)	ISO11600(2000) 類別 F25 可達至英式國際性能標準： BS5889A, BS1802, BS4254, BS6093, BS6213
顏色選擇(Colours)	灰、黑、白或可訂做顏色
變位承受百分率(Movement Accommodation Factor)	25%
外層初步凝固時間(Tack Free Time)	30 - 120 分鐘

#### 一般應用範圍

專門應用於石屎、雲石、磚牆伸縮縫、鋁窗身外框，幕牆鋁鉸等。

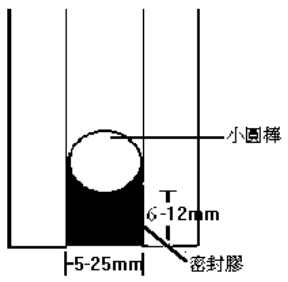
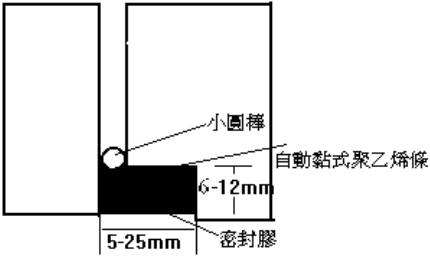
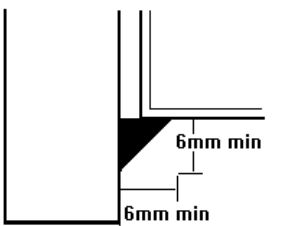
#### 事前準備及應用步驟

- 先將附著施工面上塵埃，油脂及疏鬆物質清除。根據物質類別，如有需要塗上適當底油並讓其乾固。
- 將墊底小圓棒(比原縫口寬度大約 30%)放於預算深度以支撐未凝固密封膠及作中介物以保持密封膠只黏附兩個接觸面。如果縫口深度不足夠擺放墊底小圓棒，可以用自動黏式聚乙烯條代替。如應用接觸面超過兩個，應用自動黏式聚乙烯條將其餘接觸面和密封膠隔離。(有關縫口設計及底油選擇請參閱背頁)
- 如須預防縫口周邊黏上多餘密封膠，可先用自動黏式聚乙烯條將周邊貼妥並於施工後和密封膠未凝固前將貼條挑起。
- 施工前先確定底油已完全乾固，施工唧膠鎗為適用於 600ml 豬腸裝類型。
- 將膠鎗咀斜切出一個適合縫口的實際大小，順貼施工面上將密封膠慢慢逼出，留意密封膠是否已將兩面緊貼，施工於垂直縫口時可將鎗向下，從上至下施工。這可減低氣泡形成機會，令效果更理想。
- 在密封膠未凝固前用工具將表面燙平。

#### 工具清洗

可用二甲苯或天拿水清洗。

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<p><b>縫口設計圖 A</b></p> <p>從實驗中顯示當「對接型」縫口所卸上膠體的寬度和深度成 2:1 所發揮效果是最理想的。但如果縫口以撕拉式移動則需要將深度定大於寬度。</p> <p>較闊的縫口或需要分兩次施工來完成封口。第二次施工時需讓第一次的膠稍為凝固才開始。</p> 	<p><b>縫口設計圖 B</b></p> <p>如果縫口深度不足容納小圓棒，可改用自動黏式聚乙烯條以保證密封膠只與兩個平行接觸面黏合。</p> 
<p><b>縫口設計圖 C</b></p> <p>當施行三角形色封口則應是一個正三角形而貼邊位起碼長 6mm。</p> 	<p>萬寶牌 S338 可塗上漆油但如其它密封膠一樣，若果出現較大幅的伸縮移位，漆油層會破裂亦同時影響密封膠的耐用性能。當寬度與深度比例改變，變位承受百分率亦會降底。在設計縫口須考慮這類變數。</p>

### 底油選擇

- 石屎、木質及多微孔面需塗上偉利 160 底油並需 45 分鐘至 2 小時乾固。
- 非疏鬆及光滑面可用偉利 140 底油並需 45 分鐘至 2 小時乾固。

### 衛生與安全

在正常使用及遵守一般處理化學品的情況下，萬寶牌 S338 並不具備危險特性。進一步資料可參考物質指南。

### 用量預算

以下公式可估計所需用量：

$$\frac{\text{封口橫切面積}(\text{mm}^2) \times \text{縫口長度}(\text{M})}{600} = \text{600ml 豬腸裝數量}$$

### 包裝形式

600ml (高效能合金紙) 豬腸裝