



MASTERPROOFER S188

High Performance Modified Silicone Sealant

改良性硅酮密封膠

1.0 Description

MASTER PROOFER S188 is a one part neutral RTV Modified Silicone Sealant (M.S. Polymer) which combines the strengths of silicone and polyurethane while eliminating their drawbacks. Master Proofer S188 is manufactured to tackle the demanding sealing and decorative requirement in both Construction and Industry area. It is developed to stringent the specification of Master Proofer Company Ltd of which unique features are offered: Weatherability, Non-Staining, good curing rate at low temperature.

2.0 Technical Data

Base Polymer	M.S. Polymer Rubber
Storage Condition	Keep dry between 5°C&30°C
Shelf Life	12 months @ 25°C
Application Temperature	5°C to 50°C
Tooling Time @23°C 50% RH	10 – 15 min.
Skinning Time @23°C 50% RH	25 –50 min
Curing rate @23°C 50%RH mm/day	2 - 3
<u>After Completely cured</u>	
Shore A Hardness(DIN 53505)	40±3
Service Temperature	-40°C to 90°C
Average Life Expectancy	> 20 years
Resistance to Water	Excellent
Resistance to Chemicals	Good for dilute acids and Alkali, soil and fuel
Resistance to U.V.	Excellent
Resistance to Electricity	Excellent
Flammability	Does not support combustion
Flash Point(DIN 51794)	430°C
Standards Compliance	B.S. 5889A , ISO11600
Colour	White, Black, Grey.
Dynamic Movement Capability	± 35%
Tensile Strength (DIN 53504, Mpa.)	1.6 – 2.0
Elongation at Break	400%

3.0 Typical Application

General filling and sealing of gaps, Movement/Expansion joints in masonry, Swimming Pool, GRC, GRP, Base plate, etc., weathersealing curtain walls and other glass/metal assemblies, Precast concrete panel etc. Stone cladding, marble cladding and E & M fixtures plumbing fixtures and others metal works like vehicle body.

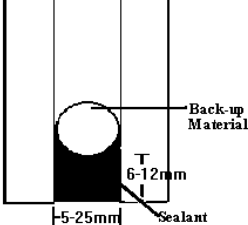
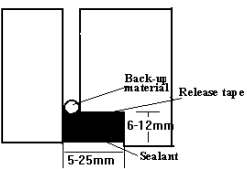
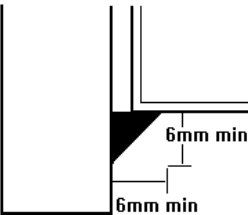
4.0 Preparation

All surfaces should be 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 lacquers etc is removed prior to the application of the sealant. Further advice on substrate preparation is available from Master Proofer Technical Services Department, where particular surface treatment are encountered, or if even higher adhesion is required.

MASTER PROOFER

MASTER PROOFER S188 Modified Silicone Sealant

5.0 Joint Design

<p>Joint Design Diagram A</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>Joint Design Diagram B</p> <p>If the joint is not deep enough to accommodate the foam backing strip, a self-adhesive polyethylene tape should be used to ensure that the sealant bonds only to the side of the joint.</p> 
<p>Joint Design Diagram C</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>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 wide</p>

6.0 Application

Before starting application ensure that any primer or cleaner has dried fully. Using MP Gun A911 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, be carefully removed, ensuring that it is not dragged across the face of the joint.

7.0 Coverage

The following formula gives the quantity of (300ml) cartridges required:

$$\frac{\text{Joint width} \times \text{depth}(\text{mm}^2) \times \text{Length}(\text{M})}{300} = \text{No. of cartridges}$$

8.0 Health and Safety

MASTER PROOFER S188 is free of ISOCYANATES and solvent; it is non-hazardous after completely cured. However, during the curing process, Master Proofer S188 issues methanol. These vapours must not be inhaled for prolonged period or in high concentration levels. The working area should be well ventilated. Due to possible irritation, all contact of product with eyes or mucous areas must be avoided. For further information, consult relevant Material Safety Data Sheet.

9.0 Cleaning

Fresh product is easily removed with an organic solvent. When cured it can only be removed by mechanical mean only.

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 S188 is packed in 400g (300ml) / cartridges and 800g(600ml).

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中性高效能改良性硅酮密封膠

1.0 簡介

萬寶牌 S188 是一種中性高效能改良性硅酮密封膠。它集合了和聚胺脂優點，但去除了它們的弱點成為新一代高效能密封膠型材。萬寶牌 S188 它依據萬寶建築化材的特殊規格生產以符合建築業及工業上日益嚴格的密封及外觀設計要求。萬寶牌 S188 的優越特點是：高耐侯性、非色素黏污性、低溫下穩定凝固性。

2.0 技術資料

基礎聚合物	改良性硅酮體
最佳儲存條	5°C - 32°C
儲存有效期	在 25°C 下可達一年
施工溫度	5°C 至 50°C
施工時效 (23°C 50%RH)	10 至 15 分鐘
表干時間 (23°C 50%RH)	25 至 50 分鐘
凝固連度 (23°C 50%RH)	每天 2 至 3 mm
完全凝固後	
膠體壽命	超過 20 年
硬度(Shore A)	40±3 DIN 53505
防水性能	極高
抗化性能	對稀酸，酸鹼汽油等特性
抗紫外線老化	極高
抗電流量	良好
可燃性	非易燃品
燃點	430°C
符合規格	BS5889A, ISO11600
顏色	白、黑、灰
變位承受度	±35%
伸展極限	400%

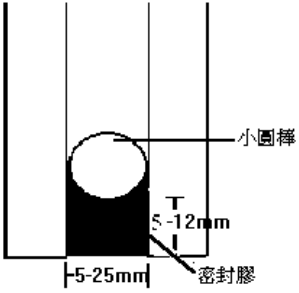
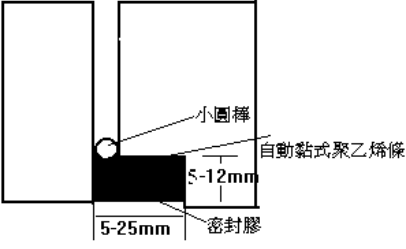
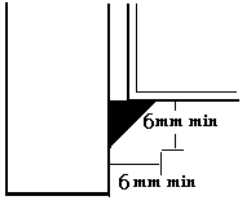
3.0 一般應用範圍

玻璃製品、櫥窗、門框、石屎、雲石、磚牆伸縮縫、游泳池、室內潔具、浴缸、洗手盆，鋁窗身外框及預製件等。工業配件，汽車制件、機械電工密封等。

4.0 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，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。
- 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貼，施工於垂直縫口時可將鎗向上、從下至上施工。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。

5.0 縫口設計

<p>縫口設計圖 A</p> <p>從實驗中願視當‘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>縫口設計圖 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>縫口設計圖 C</p> <p>當施行三角形式封口則應是一個正三角型，而黏滲位起碼長 6 mm</p> 	<p>當寬度與深度比例改變，變位承受百分率亦會降低。在設計縫口須考慮這類變數。</p>

6.0 工具清洗

可用二甲苯或天拿水清洗。

7.0 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 S188 並不具備危險特性。萬寶牌 S188 不含異氰酸鹽及溶劑，但 S188 凝固過程中會釋出甲醇。施工環境必須有足夠通風，如眼部意外接觸，須見醫生診治。

8.0 用量預算

以下公式可估計所需用量:

$$\frac{\text{封口橫切面積}(\text{mm}^2) \times \text{縫口長度}(\text{M})}{300} = 400\text{g 膠筒裝數量}$$

9.0 包裝形式

400g(300ml) 膠筒裝 , 800g(600ml)/Sac