

環氧樹脂注射程序示範

Epoxy Resin Injection Operation Guide

現場狀況 Objective Status: 外牆空鼓，批盪開裂 Debonding Plaster layer with Cracks and Cavities 物料 Material: 立康牌 I766 環氧樹脂 LABOND EpoxySeal I766

地點 Location: 深圳市日通物流倉庫 Nippon Express in Shenzhen

機件 Machine: 立康牌 A918 電動注射器 MP Pump A918

第一步 - 鎚擊測試

Step 1 - Hammer Test

找出空鼓部份及其「最高點」，以決定種針位置。

Locate voids/detached plaster layer and to identify the “peak point” for fixing nozzles.



第二步 - 鑽出樹脂注射路徑及放置針咀

Step 2 - Drilling injection path and set nozzle

依圖三所示，以 90° 度直線用電鑽穿透各層批盪直達結構或磚層。

Drill up to sound base of structure so that all layers are penetrated per drawing of step 3

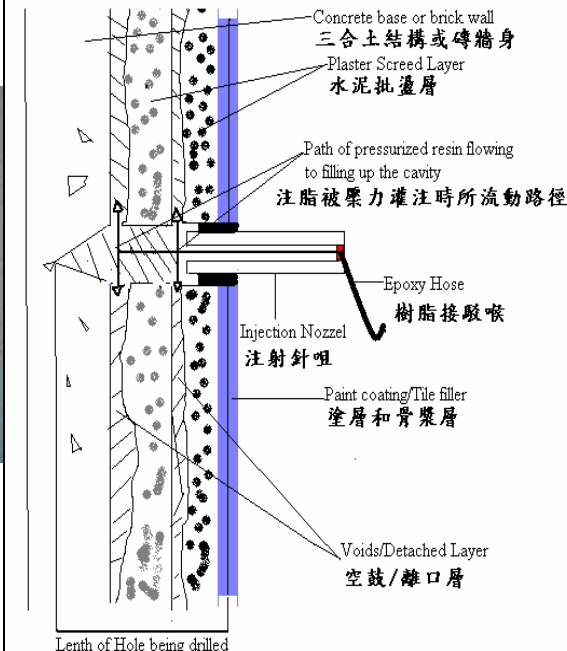


第三步 - 注射針咀固定位置設定圖

Step 3 - Injection nozzle setting position

正確設定針咀深度位置才可確保樹脂能填滿空隙及裂縫。

Correct setting of depth is to assure injection resin being path to fill up all cavities in all layers.



第四步 - 緊固注射針咀

Step 4 - fixing of Injection Nozzel

用手扳適當地固定針咀。

Make sure the nozzle is set and tighten at the position in proper depth by spanner.



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第五步 – 用萬宝 putty 高強度修補膠或 C106 灰漿將已缺口封好，以防樹脂溢出。

Step 5 – Sealing cracks and leakage around the injection location by MP Putty or C106 Mortar. to avoid seepage of epoxy resin from leakage points.



第六步 – 檢查及設定 A918 於注射狀態。必須由已受訓人員控制 A918 注射器。

Step 6 – Make MP Pump A918 ready. Make sure only trained worker to operate the pumping machine.



第七步 – 將適當份量 I766 A 部及 B 部混合。

Step 7 – Mixing Part A and Part B component of EpoxySeal I766 with appropriate quantity.



第八步 – 在進行注射及在過程中，用小槌敲打牆身，從回音確定空鼓是否已被填滿。

Step 8 – proceed injection, during processing, use hammer to ascertain if voids of respective being filled according to feedback sound.



技術重點:

1. 注射環氧樹脂是解決空隙及結構上的問題，而非滲漏問題。若是由三合土龜裂所產生的漏水必須由注射聚胺脂來解決。
2. 環樹脂注射劑分為快速凝固及漸速凝固兩類，若需修補空隙問題，應該用漸速類別。
3. 不同品牌的樹脂會產生質量上的差異，或在潮濕介面上不能凝固黏合等問題，因此必須應用一些能在潮濕介面上黏合的樹脂(如 I76。)

Technical Keys :

1. Epoxy injection is just to tackle structural repair but not waterproofing leakage. For seepage caused by hair cracks, it requires Polyurethane resin to seal up the leakages.
2. Epoxy resin is formulated into fast curing and general curing types. For voids reinstatement, always use general curing type.
3. The quality of epoxy resin of different brand is different, some epoxy cannot bond the substrate when it is wet. It has to make sure the epoxy resin (like I766) could bond even under wet conditions.