



## Core-Bonder

*Partner with Structural Engineering*

Marketed by :

**Amport International (HK) Limited**

Tel : (852) 2341 2388 Fax : (852) 2341 8904 E-Mail : info@amport-group.com

### **Description**

Core-Bonder structural engineering bonder is a new technology product which improved from high density composite.

Core-Bonder is one of the most success and high bonding strength nowadays. The bonding strength with concrete can be up to 40MPa.

- Piling
- Bonding New and Old Concrete
- Bonding Building Stones
- Fixing bridge and machine
- Repair of Road, railway or Building Structure
- Anti-slipping Surface
- Metal and Concrete Pipe Bonding
- Suitable for bonding two different (or same) materials such as metal and stones, metal and ceramic, or combination of different metals.

### **Product Features**

- Excellent weatherability
- Unlimited impermeable
- Environmental friendly
- Non-toxic, not contain Formaldehyde and Xylene
- Excellent bonding capability
- Anti-corrosion and acid & alkali resistance
- Usable on wet circumstances
- Fast curing time (60 minutes for preliminary, and 14 days for permanency)

### **Application and Processing Methods**

1. Remove all loose particles, dust, grease and other contaminants from substrate surface.
2. Mix the two ingredients in weight ratio A : B = 1 : 1 by a simple stirrer and set for use within 60 minutes. Over which, the mixture will become solidified.

3. Apply mixture evenly onto substrate surface by brush, roller or spray, or by injection to repair slits and cavities. For high appearance, use dry cloth to sweep away and absorb excess mixture.
4. 1kg of Core-Bonder mixture can apply on smooth flat surface with approximately 5 sq-m area.
5. Do not apply twice on same area to avoid damage of the preceding work.



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### **Safety**

1. Use soapy detergent and water to clean tools and hands (it is recommended to wear protective clothing and gloves).
2. If eyes were contaminated, flush them with clean and running water for not less than 10 minutes. A doctor should then be consulted.

### **Product Data**

<b>Appearance:</b>	Material (A): Light Grey liquid Material (B): Light white liquid
<b>Mixing Ratio:</b>	(A) : (B) = 1 : 1
<b>Pot Life:</b>	Approximately 30 minutes
<b>Cure Time:</b>	30 minutes for preliminary and 7 days for permanency
<b>Storage Time:</b>	18 month unpacked

### **Technical Specification (BS6319 Standard)**

Description	Day	Value
Compressive Strength (Part 2)	7	72 MPa
Flexural Strength (Part 3)	7	22 MPa
Slant Shear Strength – fresh concrete to hardened concrete (EN12615)	28	40 MPa
Tensile Strength (Part 7)	7	6 MPa
Modulus of Elasticity in Compression (Part 6)	7	9.1 KN/mm <sup>2</sup>



美 國

## 黃金剛 結構工程黏固劑

美國黃金剛結構工程黏固劑是高新技術 - 高份子聚合物的改良性產品，是迄今面世最為出色及最高黏固力的產品之一(與混凝土結合力達 40Mpa)。

- 產品特性: 不含毒性 高拉力及高硬度  
 耐酸、耐鹼、耐高熱 可在高度潮濕的地方施工
- 使用比例: 重量計 A : B = 1 : 1

典型的應用範圍：

### 一. 植筋:

鑽好孔洞後先清潔泥灰(可用吸塵機清理)，然後灌入已混合並攪拌完畢的黏固劑，再插上鋼筋，上下攪動數次，以使黏固劑能黏走孔壁餘灰，再加以固定。

### 二. 新舊混凝土黏接:

把黏固劑混合後充分攪拌，然後塗上舊混凝土表層(約 3 mm 厚度)，並隨著鋪上新混凝土漿即可(不可待黏固劑乾後才鋪混凝土)。

### 三. 石材黏固:

把黏固劑在石材背面塗上幾處，貼上牆加以穩固即可。

### 四. 橋樑、機器穩固:

除需要良好的彈性模量和韌力外(如橋樑黏接)，用家可以添加石英沙和碎石，以增強其硬度。

### 五. 道路、跑道、大廈結構性修補:

道路、跑道修補建議添加石英沙、碎石等增強其硬度(或參考新舊混凝土方式修補);大廈結構性修補則先將斷裂層清洗或清除干淨，然後灌入黏固劑即可。

### 六. 路面防滑:

在路面鋪上粘固劑後即洒上鋼沙，或把鋼沙直接混合於黏固劑中，再鋪上路面。

### 七. 金屬、混凝土管道黏接:

用於煤氣管、水管、輸油管等的黏接，直接把黏固劑塗上接口，擰上螺絲或加以固定即可。

### 八. 其他方面的黏接:

適用於不同物料和相同物料之間的黏接，例如金屬同石材，金屬同瓷器，不同種類的金屬黏接等。

黏固劑混合後，可使用時間為 30 分鐘，30 分鐘後表面開始凝固;

24 小時抗壓強度達 46Mpa，可初步使用，固化週期為 7 天。

力學資料 Technical Data: 英國標準---BS 6319, 7 Days at 20

抗壓強度 (Compressive Strength): 72 Mpa (24 小時/46Mpa)

抗壓彈性模量 (Modulus of Elasticity in Compressive) 9.1 KN/mm<sup>2</sup>

抗拉強度 (Tensile Strength): 6 Mpa 與混凝土結合力 (Bond with Concrete): 40 Mpa

抗彎強度 (Flexural Strength): 22 Mpa

鋼與鋼粘結 抗拉強度 Tensile Strength (Steel & Steel)	鋼與鋼粘結 抗剪強度 Flexural Strength (Steel & Steel)	鋼、砼粘結 抗拉強度 Tensile Strength (Steel & Concrete)	鋼、砼粘結 抗剪強度 Flexural Strength (Steel & Concrete)	抗壓強度 Compressive Strength
45.0 MPa	11.59 MPa	5.20 MPa	3.69 MPa	79.5 MPa