

茲證明  
EMPRESA  
COMPANY

中鐵十六局集團北京轨道交通工程建設有限公司  
CHINA RAILWAY 16 BUREAU GROUP BEIJING METRO  
ENGINEERING CONSTRUCTION CO., LTD

持有證書  
Certificado N.º  
Certificate No.

發佈號  
Emissão n.º 1  
Issue n.

有效期 data/date  
2024年11月06日  
6<sup>th</sup> November 2024

至 válido até/valid until  
2025年05月05日  
5<sup>th</sup> May 2025

所列產品  
Produto  
Product

預拌混凝土系列 F04 :

- 混凝土強度級別為 B50;
- 坍度級別為 S2

本混凝土系列的具體內容須參照本證書之附件。

**Ready-mixed Concrete Family F04**

- strength class B50;
- slump class S2

*Detailed information regarding this family shall refer to the appendix of this certificate.*

符合  
em conformidade com  
in conformity with

預拌混凝土認證細則(文件編號: LECM/RC/05)  
Certification Rules for Ready-mixed Concrete (Document no. LECM/RC/05)

廠址  
Fábrica  
Factory

廣東省廣州市番禺區化龍鎮金山大道209號, 廣東珠三角預製構件場  
Guangdong Pearl River Delta Prefabrication Plant, 209 Jinshan Avenue, Hualong Town, Panyu District, Guangzhou city, Guangdong Province.

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Tem autorização para utilizar o logotipo de certificação do LECM  
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This certificate is issued by LECM in accordance with the Dispatch no. 56/SATOP/98 of Macao Government.

澳門土木工程實驗室  
Pelo Laboratório de Engenharia Civil de Macau  
For and on behalf of the Civil Engineering Laboratory of Macau

董事會主席 Presidente da Direcção  
President of the Board of Directors

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## 預拌混凝土認證證書附件(版本號 A)

## Appendix of Ready-mixed Concrete Certificate (Version no. A)

證書編號 Cert. no.	P8922	發佈號 Issue no.	1
公司名稱 Company:	中鐵十六局集團北京轨道交通工程建設有限公司 CHINA RAILWAY 16 BUREAU GROUP BEIJING METRO ENGINEERING CONSTRUCTION CO., LTD		
廠址 Factory address:	廣東省廣州市番禺區化龍鎮金山大道 209 號, 廣東珠三角預製構件場 Guangdong Pearl River Delta Prefabrication Plant, 209 Jinshan Avenue, Hualong Town, Panyu District, Guangzhou city, Guangdong Province		
證書有效期由 effected since :	2024 年 11 月 06 日 6 <sup>th</sup> November 2024	至 to	2025 年 05 月 05 日 5 <sup>th</sup> May 2025

## 預拌混凝土系列 F04 的具體內容

- 所使用廣東清新水泥有限公司生產的硅酸鹽水泥種類一級別 52.5;
- 粉煤灰最大摻量為水泥量的 25%;
- 聚丙烯合成纖維用量為 1.2kg/m<sup>3</sup>(每立方混凝土);
- 粗骨料為花崗岩質碎石,最大骨料粒徑 25mm, 細骨料為河砂;
- 使用高效減水劑;
- 來自廣州公共供水系統的水作為拌合水;
- 混凝土強度級別為 B50;
- 坍度級別為 S2

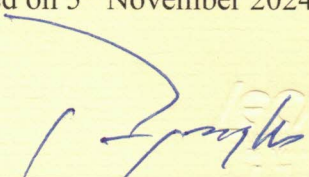
參考混凝土為 B50 強度級別

## Detailed information about Ready-mixed Concrete Family F04

- with Portland Cement Type I 52.5 manufactured by Guangdong Qingxin Cement Company Limited;
- PFA maximum content 25% of cement;
- Polypropylene Fiber's dosage is 1.2kg/m<sup>3</sup> (each cubic meter of concrete);
- crushed granitic stone with maximum size 25mm as coarse aggregate, river sand as fine aggregate;
- superplasticizer as admixture;
- mixing water from Guangzhou public water supply;
- strength class B50;
- slump class S2

The reference concrete is strength class B50

發佈於 2024 年 11 月 05 日

Issued on 5<sup>th</sup> November 2024  
澳門土木工程實驗室董事會主席

President of the Board of Directors of the Civil Engineering Laboratory of Macau