

IP MARKETPLACE

CONNECTING INNOVATION TO YOUR BUSINESS

TECH OFFER

A Process of Producing A Lightweight Eco-Friendly Hollow Masonry Block



▶ MORE INFORMATION

MEGA-TREND

- **Building Technologies**

TECHNOLOGY READINESS LEVEL (TRL)

- **TRL 5**

PATENT/ GRANTED NUMBER

- **PI 2020002945**

▶ TECHNOLOGY OVERVIEW

The present invention relates a process of producing a lightweight eco-friendly hollow masonry block comprises of the following steps: Preparing the composition of hollow masonry block which comprises of a binder, fine aggregate and coarse aggregate wherein: Binder consisting weight ratio (3:7) of palm oil clinker powder and cement; Fine aggregate consisting manufactured sand (M-sand); and Coarse aggregate consisting weight ratio of palm oil clinker and crushed granite. Further Characterised by: Mixing binder, fine aggregate and coarse aggregate simultaneously at room temperature for a duration range of 3-5 min to form a hollow masonry block consisting of the mix ratio of (1:4.4:1.6)

using fineness modulus method of concrete mix; Adding 176 kg/m³ water and mixing with the hollow masonry block mix preferably for 5-8 min to obtain a homogenous mixture; Conducting a slump test to ensure that the mixture is dry; Casting and moulding masonry block mix to form hollow masonry block; Covering and storing hollow masonry block (6) preferably at temperature range from 28°C to 32°C and relative humidity preferably range from 60-80% for 28 days.

CONTACT US!

Dr. Lee Ching Shya

UMCIE Business Officer

Email: leecs@um.edu.my

Phone: +603 – 7967 7351 / 7352