



# FCS

Material & Product Knowledge



# Interlocking Brick Benefit



## FAST

- No Plasterworks
- No Formworks
- Less Rebars
- Easy to Install
- No need for mortars in between



## COST

- No material wastage
- Less labor costs
- Cost effective construction system
- Faster return of Investments (ROI)



## STRONGER

- Load bearing
- 2,000 to 3,500 psi
- 8x stronger than conventional bricks



## ARCHITECTURAL FINISH

- Eye catching finishes: English, Tropicana, Mediterranean and Modern Contemporary Design



## GREEN BUILDING

- Smart architecture
- Zero Carbon
- Zero Carbon
- Cooler Inside



## EASY

- Faster to build
- Reduces the need for skilled workers



## ECONOMY BENEFITS

- Creates local employment
- Uses local available materials



Looks like a brick  
Feels like a brick  
But it's not like any other brick



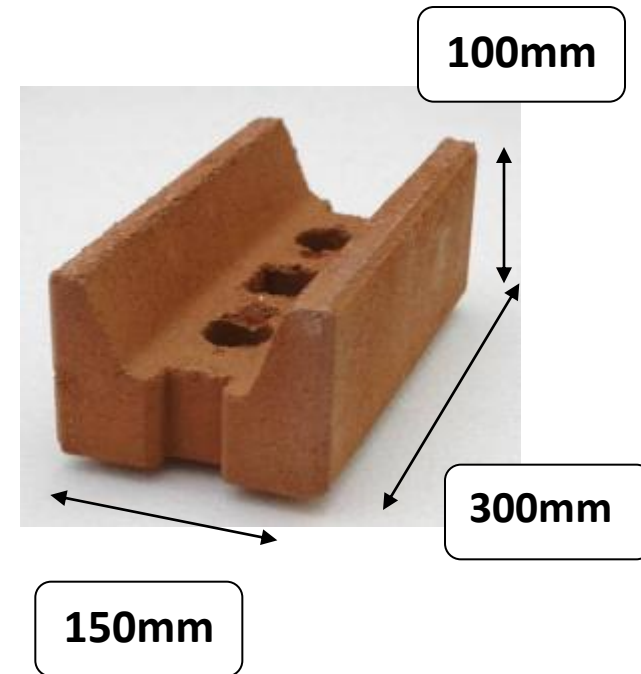
# FCS Products Specification

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## 1. U Brick

U Brick has a specific size

- Full size with 300mm length, 150mm width, and 100 mm height.
- U Brick can also function as sloof pairing, brick ring, and also suspended brick with an adjusted span.
- U Concrete Brick has a hole below, to bond sloof and foundation.
- The weight is 7 kg.

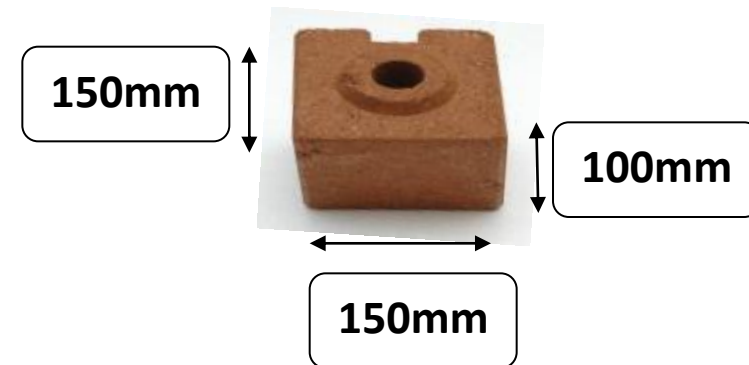
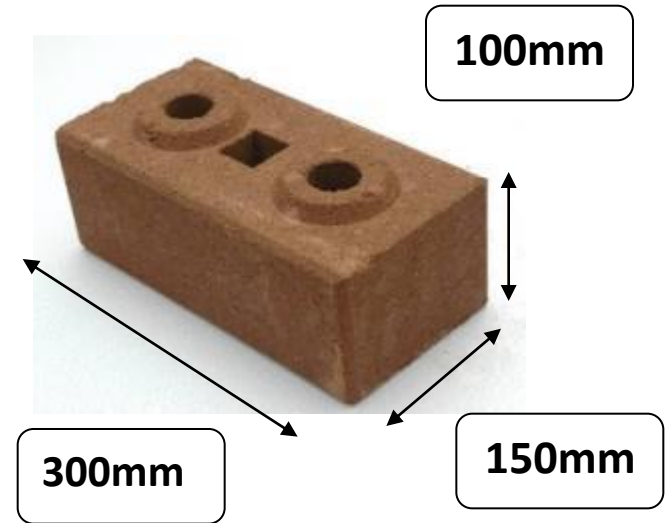


# FCS Products Specification

## 2. I Brick

I Brick has two sizes:

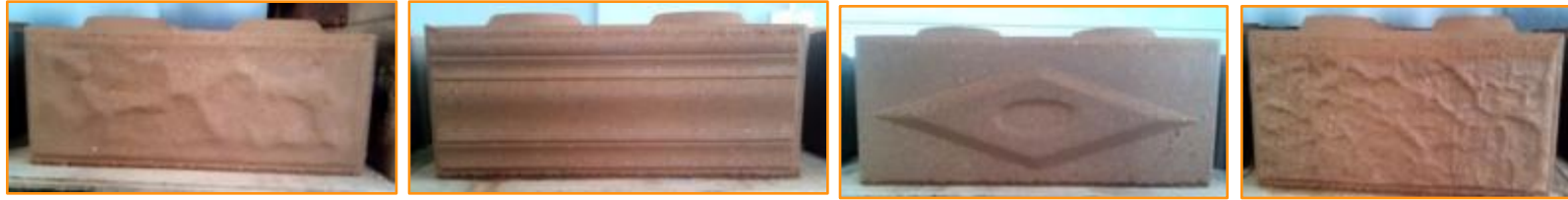
- Full size with 300mm length, 150mm width, and 100 mm height.
- Half size with 150mm length, 150mm width, and 100mm height.
- I Brick can be used as walls and other partitions
- With the holes in the I Brick, the ossification can be done inside the wall.
- The weight is 7 kg (full-size) and 3.5 (half-size)



# FCS Products Specification

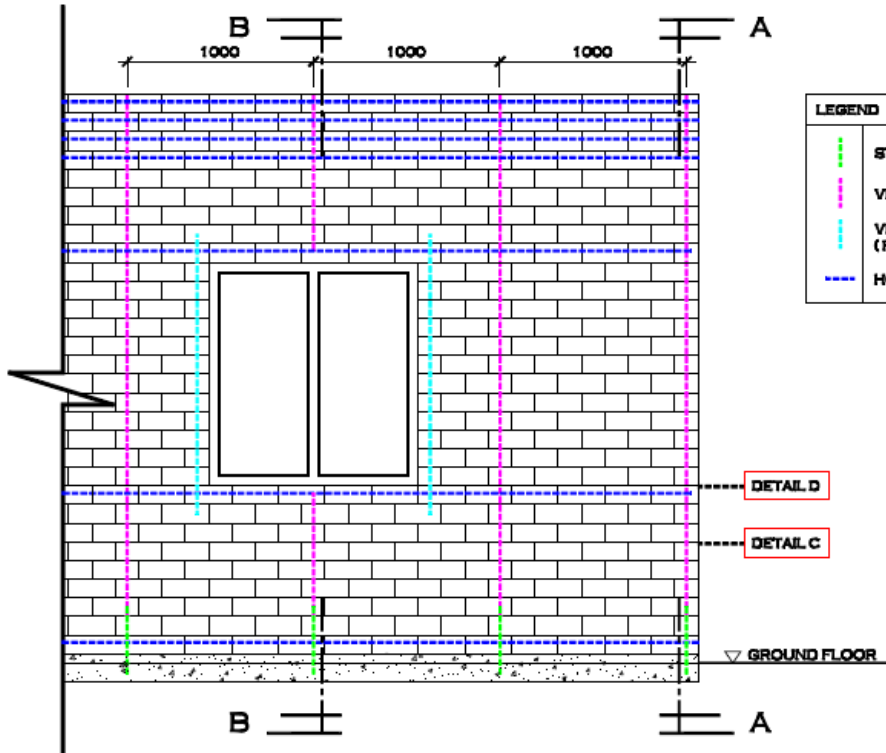
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## 4. Brick Finishing

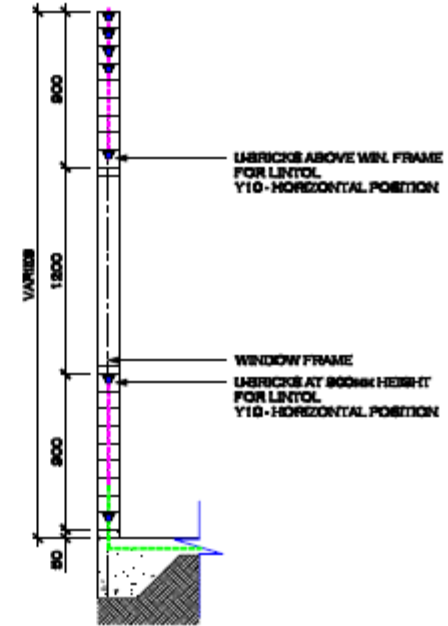
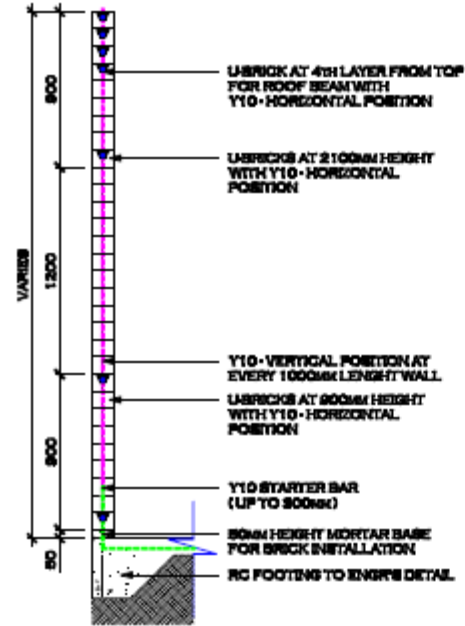


# FCS Products Installation

## FCS Wall Detailed Pictures



LEGEND	
	STARTER BAR Y-10
	VERTICAL Y-10
	VERTICAL Y-10 (FOR LINTOL)
	HORIZONTAL Y-10



INTERLOCKING BRICKWALL  
DETAIL (OPTION 2)

# FCS Products Installation

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## 1. U Brick Installation

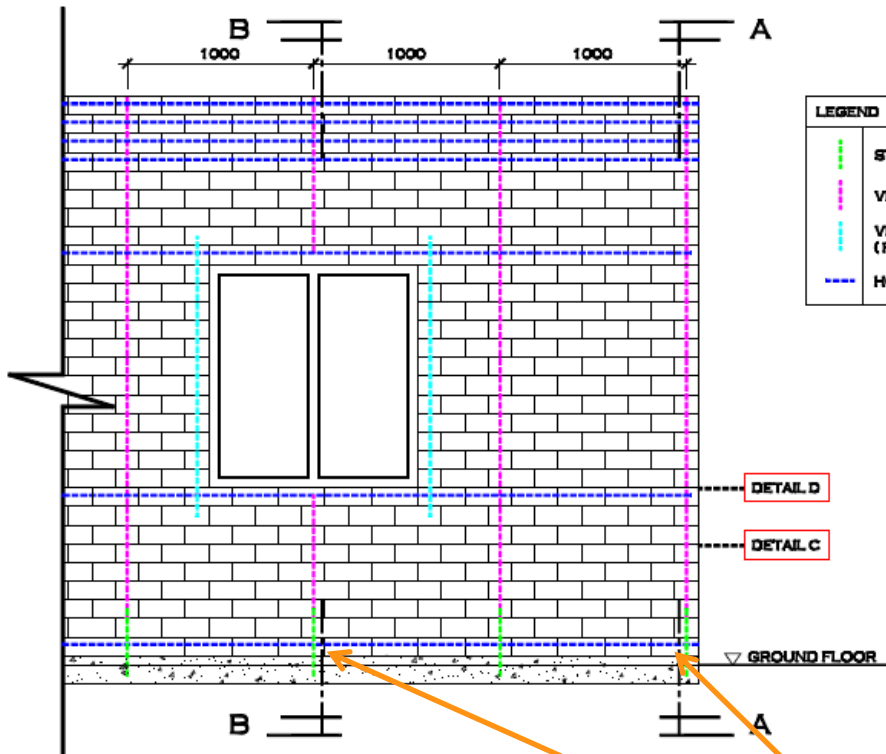
Upon installing U Brick, it is advised to have planted irons, to function as columns



Starter Bar

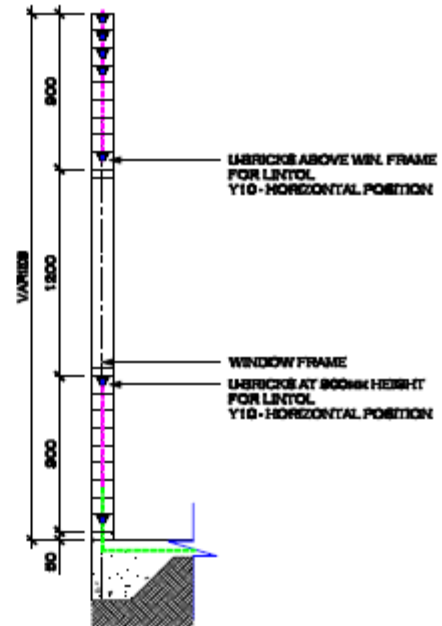
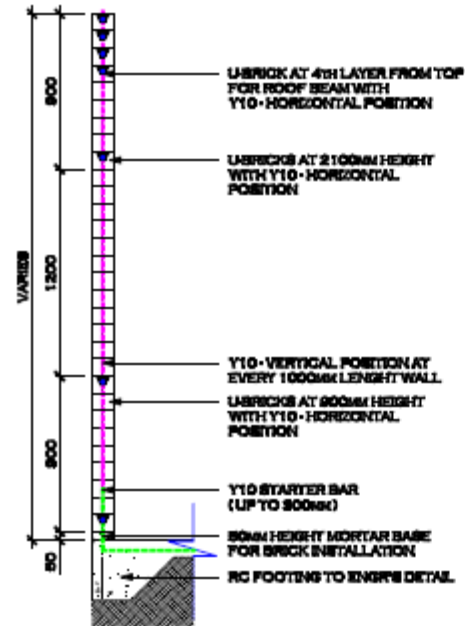
# FCS Products Installation

## FCS Wall Detailed Pictures



LEGEND	
	STARTER BAR Y-10
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	HORIZONTAL Y-10

DETAIL D  
DETAIL C



INTERLOCKING BRICKWALL  
DETAIL (OPTION 2)

Starter Bar (Green) Iron  
with diameter 10.



# FCS Products Installation

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## 2. Bonding Iron Joint Installation

Upon installing U Brick in the joint, it is advised to use 8mm diamaters folded iron, to strengthen the U brick in the Joint.

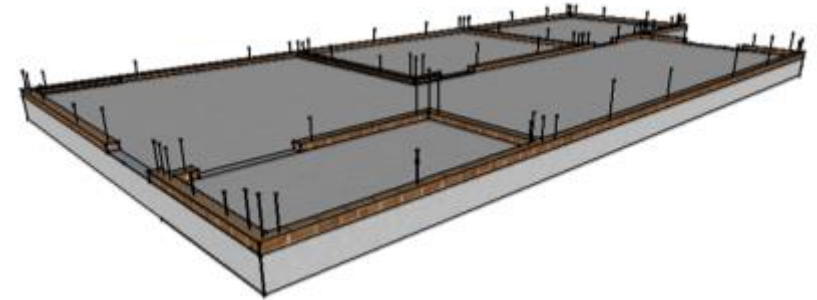
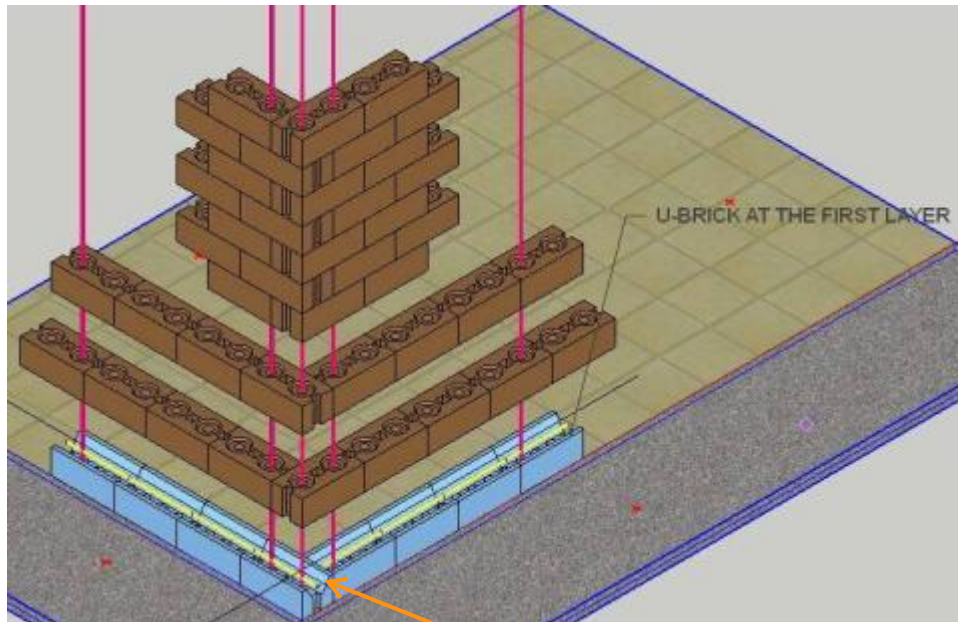


# FCS Products Instalation

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## 3. Filling Liquid mortar into the sloof

When all U Bricks and Iron are installed, do liquid mortar fillings. The mixture of the mortar is 1:3 to 1:6, with 10% water content.



Dimasukkan Mortar

# FCS Products Installation

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## 5. I Brick Installation

To install I Brick, it is advised to interlock one with the other and between each layer until the fourth layer.

This needs to be done so that the I Brick doesn't move left or right. Also, liquid mortar is used until 4<sup>th</sup> layer to ensure the strength of the foundation.



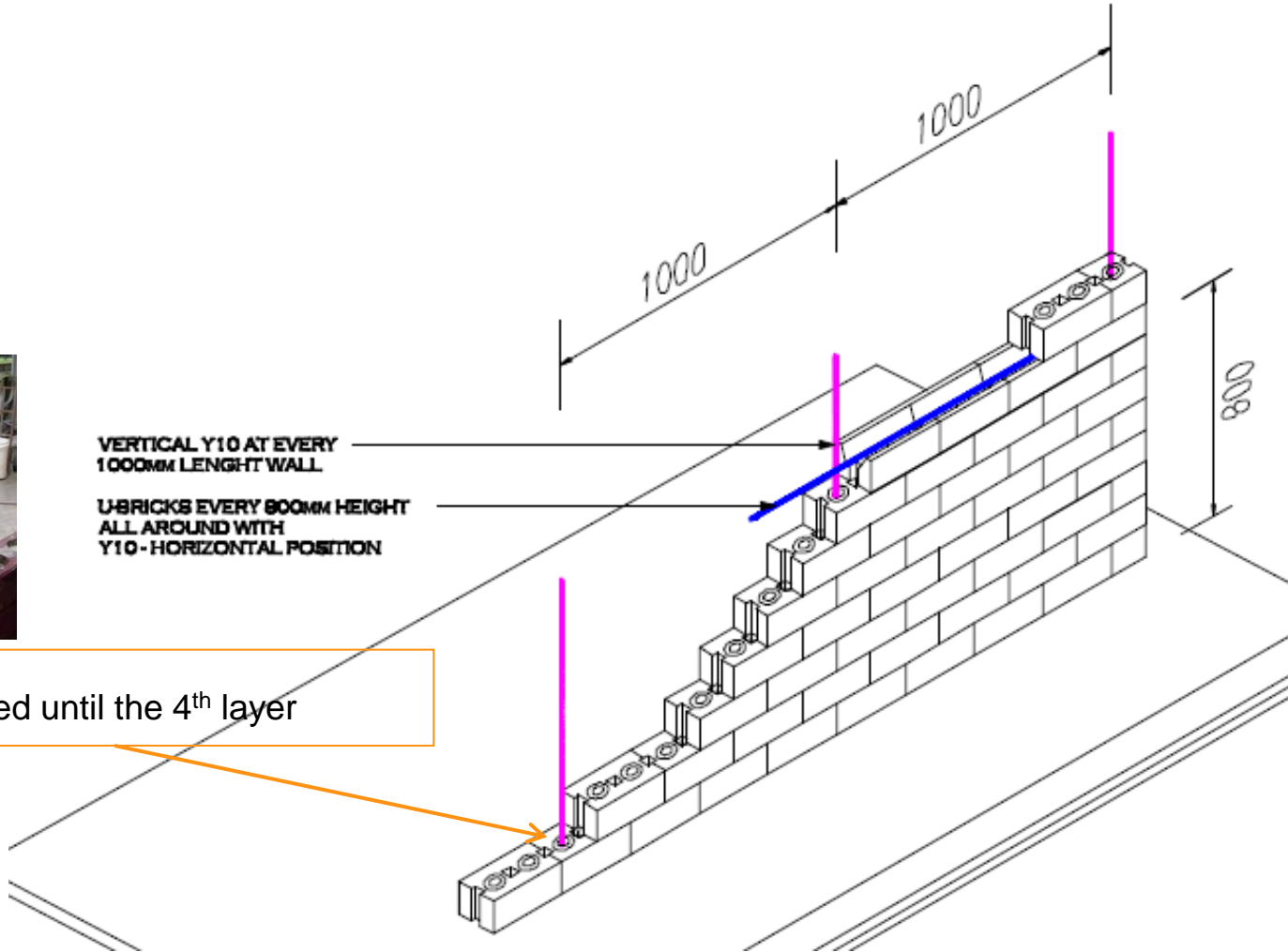
# FCS Products Installation



**VERTICAL Y10 AT EVERY  
1000MM LENGTH WALL**

**U-BRICKS EVERY 900MM HEIGHT  
ALL AROUND WITH  
Y10 - HORIZONTAL POSITION**

Mortar is filled until the 4<sup>th</sup> layer



# FCS Products Installation

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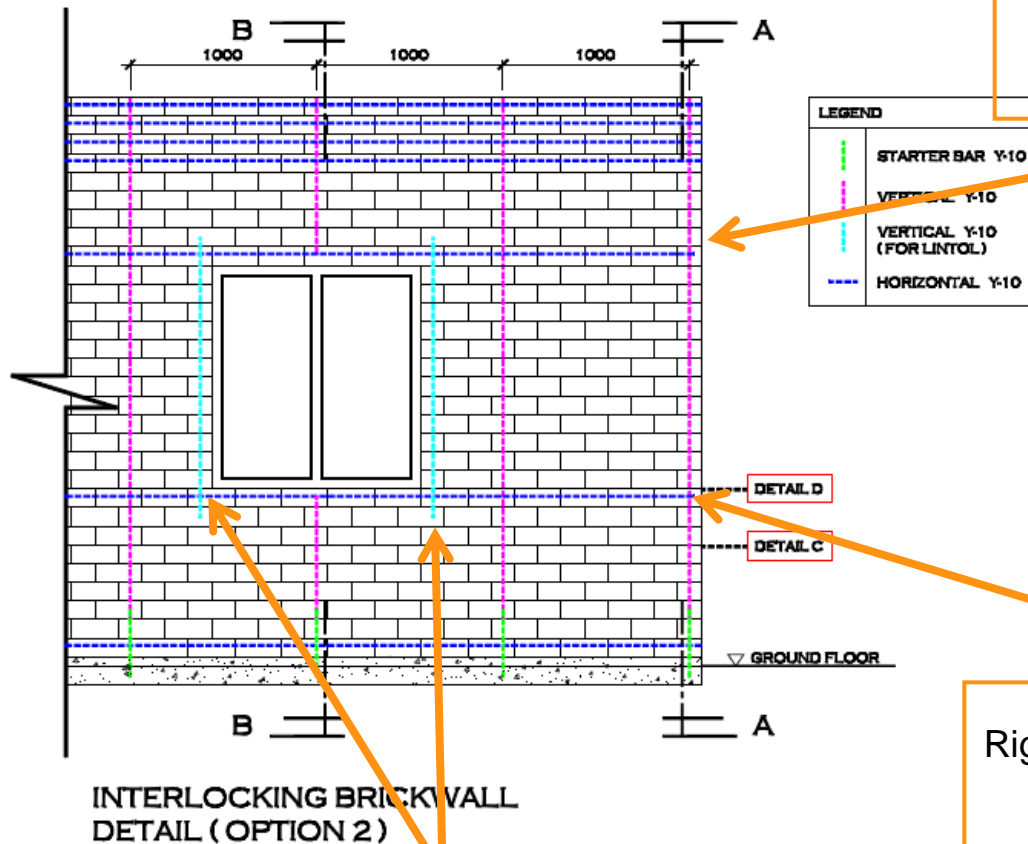
## 6. Windows/Doors Sills Installation

Before installing your sill for window or door, it is advised to ensure the length is appropriate with I Brick length after multiplied. Before the installation, use U Brick right below and above the window sill, complete with the ossification iron on the left and right side of the sill.



# FCS Product Installation

FCS Wall Detailed Picture



Right above the window sill, there is a U Brick with a 10 mm diameter iron.

Right below the window sill, there is a U Brick with a 10 mm diameter iron.

Left and right side of the sill, there are vertical irons with 10 mm diameter

# FCS Product Installation

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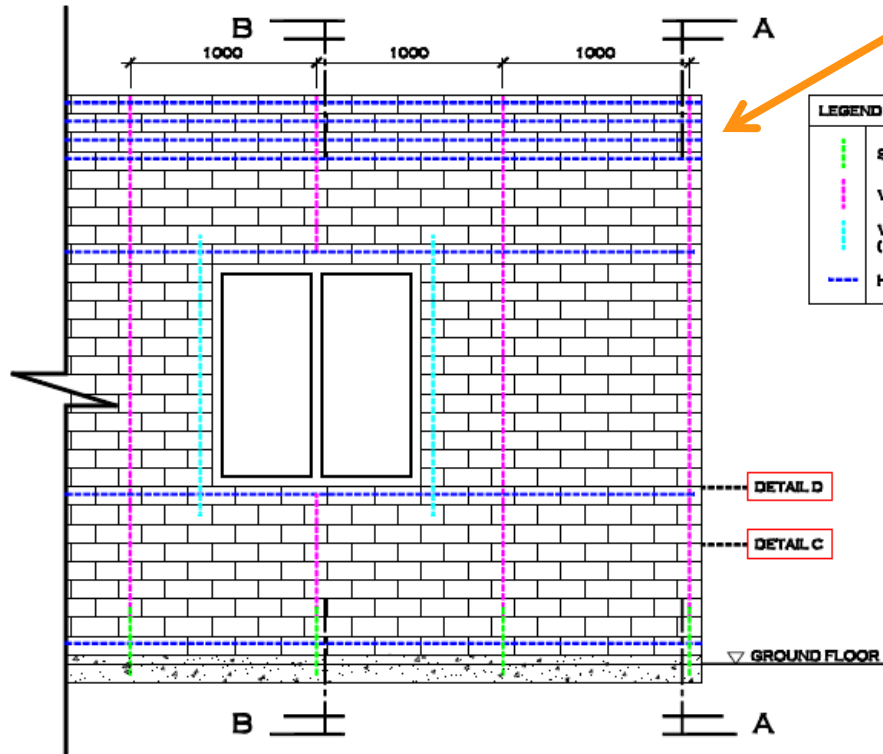
## 7. Ringbalk/beam Installation

Installing the ringbalk above, it is advised to use 3 layers of U Brick. Use the ossification iron with liquid mortar



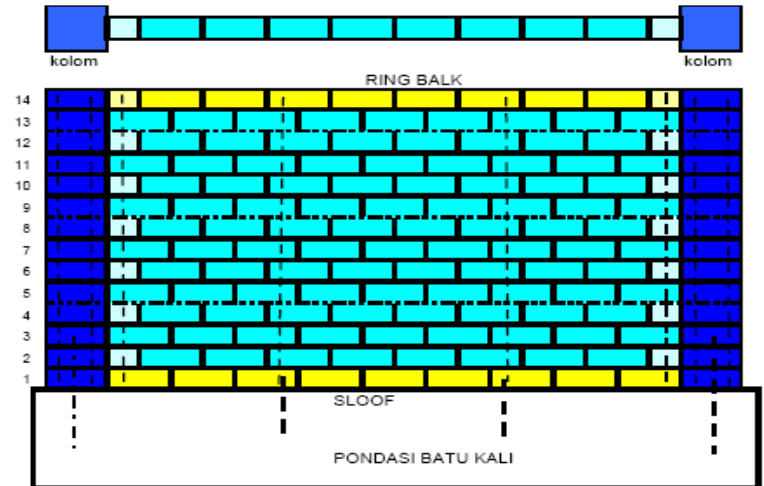
# FCS Product Installation

FCS Wall Detailed Picture



INTERLOCKING BRICKWALL  
DETAIL (OPTION 2)

For the ringbalk, 3 layers of U brick and irons with 10mm diameter are used.



For the ringbalk, 3 layers of U brick and irons with 10mm diameter are used.



# FCS Products Installation

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## 8. Electrical Installation

Conduit pipes can be inserted into iBrick holes, then we make holes for switches, but can also be seen from the outside.



# FCS Product Installation

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## 9. Finishing work.

To do wall nut filling, we can use white cement for ceramic with the desired color.



# FCS Construction System Advantages

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## Economic Advantages:

1. Faster working time
2. Less Construction Waste
3. Better looks



## Technical Advantages

1. It doesn't need wood for bekisting
2. Quicken the construction process
3. Better stability
4. Makes stronger walls
5. The gap can be filled with ossification iron, resulting in a better construction
6. The gap can also function as a good heat insulator
7. Electrical and water pipe installation can also be used in the gap
8. Resistant to Weather, impact, and abrasion.
9. Better Brick Quality
10. Can be easily installed to the wall.