

Building Regulations

EXTENSION WALL Specification Post June 2022

LIGHTWEIGHT BLOCK

FULL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K

New cavity wall to comprise of 105mm suitable facing brick. Full fill the cavity with 150mm Dritherm 32 insulation as manufacturer's details. Inner leaf constructed using 100mm lightweight block, 0.15 W/m²K, e.g. Celcon solar, Thermalite turbo. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

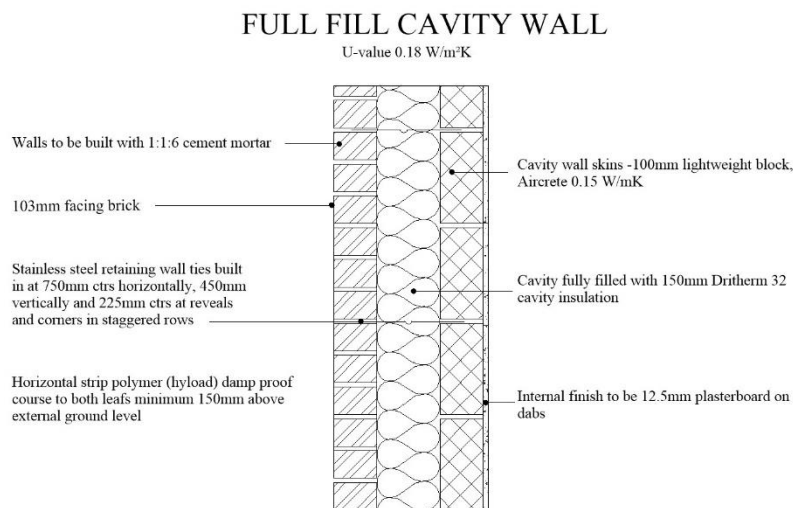


Fig. 1 Lightweight block (Not to Scale)

FULL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K

New cavity wall to comprise of 105mm suitable facing brick. Full fill the cavity with 175mm Rockwool Cavity insulation as manufacturer's details. Inner leaf constructed using 100mm lightweight block, 0.15 W/m²K, e.g. Celcon solar, Thermalite turbo. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

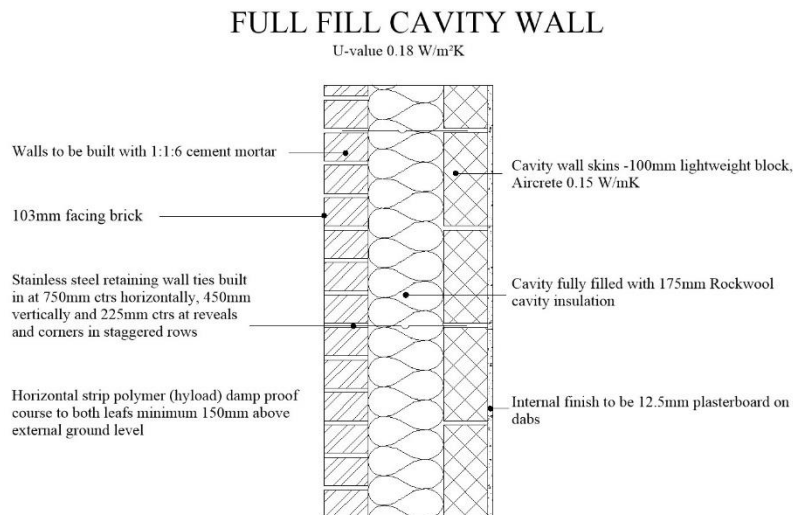


Fig. 2 Full fill cavity wall (Not to Scale)

PARTIAL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K

Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 85mm Celotex CW4000 insulation fixed to internal leaf constructed of 100mm, 0.15 W/m²K lightweight block, e.g. Celcon solar, Thermalite turbo. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

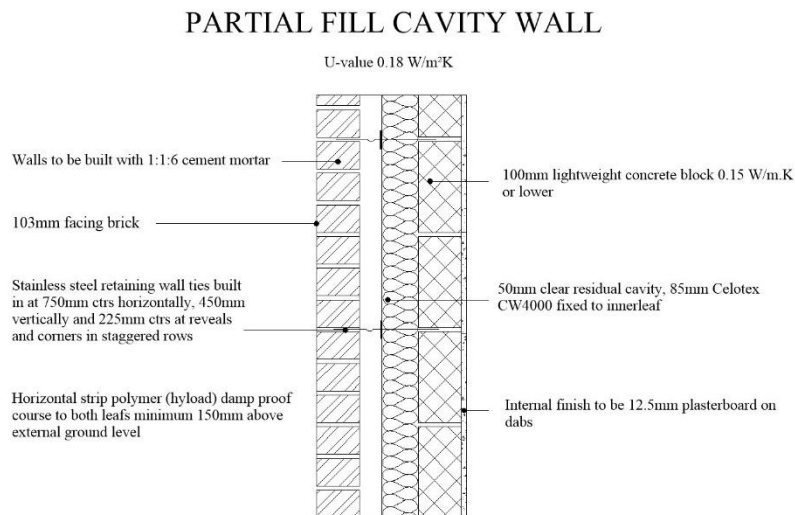


Fig. 3 Partial fill cavity wall (Not to Scale)

PARTIAL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K

Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 90mm Ecotherm Eco-Cavity insulation fixed to internal leaf constructed of 100mm, 0.15 W/m²K lightweight block, e.g. Celcon solar, Thermalite turbo. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

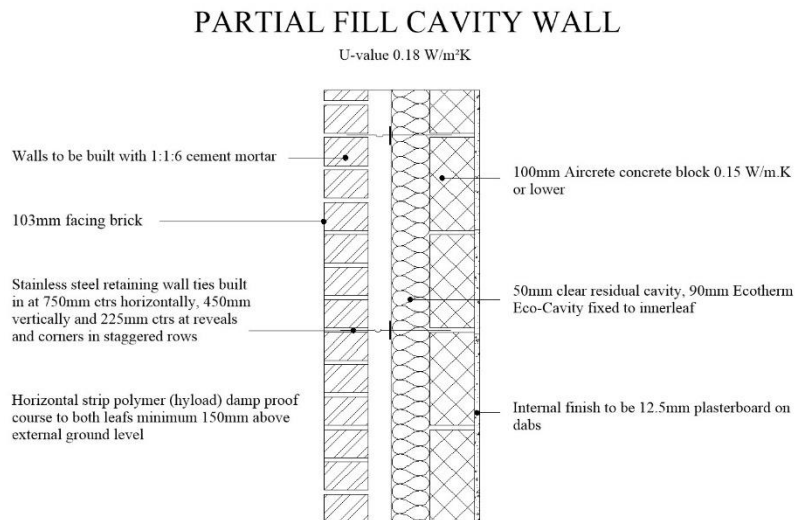


Fig. 4 Partial fill cavity wall (Not to Scale)

PARTIAL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K

Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 70mm Kingspan Kooltherm insulation fixed to internal leaf constructed of 100mm, 0.15 W/m²K lightweight block, e.g. Celcon solar, Thermalite turbo. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

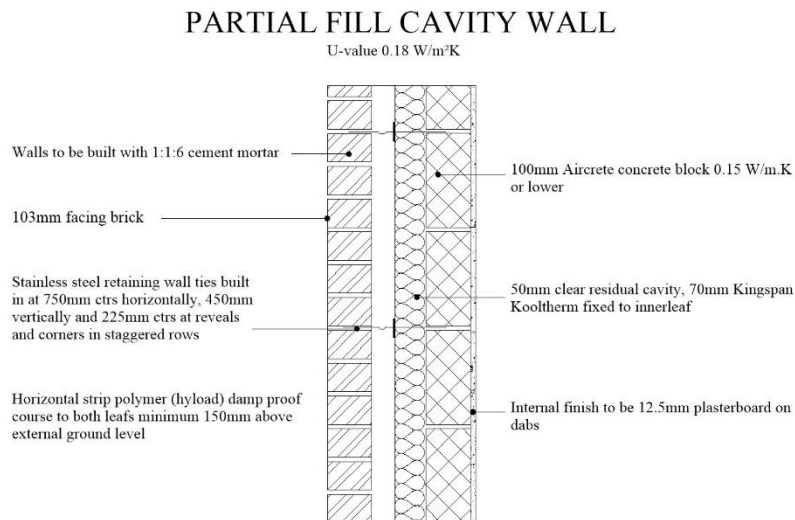


Fig. 5 Partial fill cavity wall (Not to Scale)

FULL FILL CAVITY WALL WITH INTERNAL INSULATION

To achieve minimum U Value of 0.18 W/m²K

New cavity wall to comprise of 103mm suitable facing brick. Full fill the cavity with 100mm Rockwool Cavity insulation as manufacturer's details and provide 50mm PIR insulation over vcl, e.g. Celotex GA4000 internally. Inner leaf constructed using 100mm lightweight block, 0.15 W/m²K, e.g. Celcon solar, Thermalite turbo. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

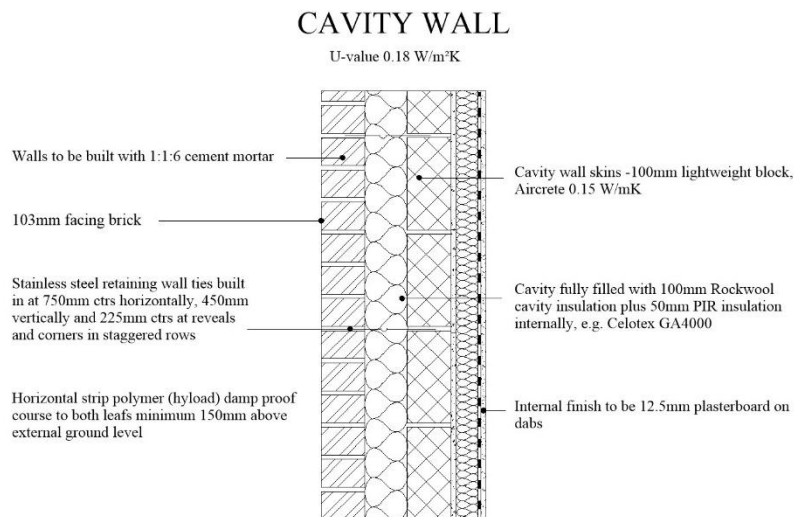


Fig. 6 Full fill cavity wall with internal insulation (Not to Scale)

PARTIAL FILL CAVITY WALL WITH INTERNAL INSULATION

To achieve minimum U Value of 0.18 W/m²K

Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 50mm Celotex CW4000 insulation fixed to internal leaf constructed of 100mm, 0.15 W/m²K lightweight block, e.g. Celcon solar, Thermalite turbo. Provide additional 50mm PIR insulation over vcl, e.g. Celotex GA4000 internally.

Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

STANDARD BLOCK

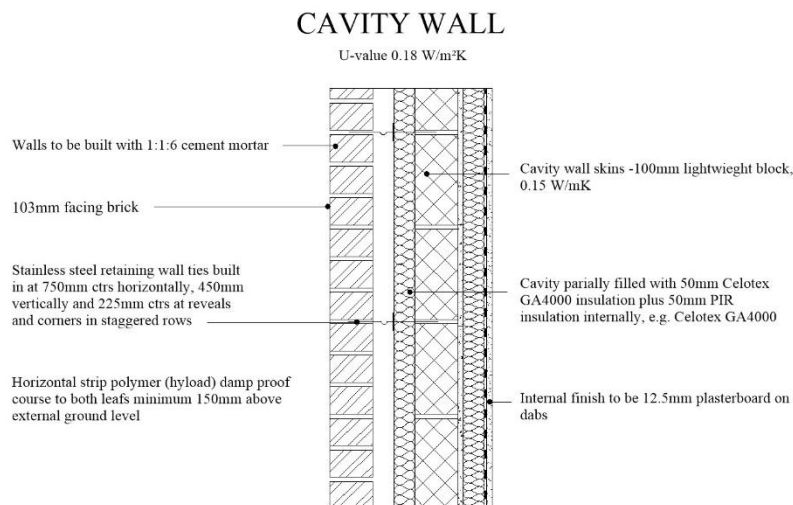


Fig. 7 Partial fill cavity wall with internal insulation (Not to Scale)

Full Fill Cavity Wall

To achieve minimum U Value of 0.18 W/m²K

New cavity wall to comprise of 103mm suitable facing brick. Full fill cavity with 200mm (2 x 100mm) Dritherm 32 cavity insulation as manufacturer's details. Inner leaf to be 100mm medium block, 0.45 W/m²K. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

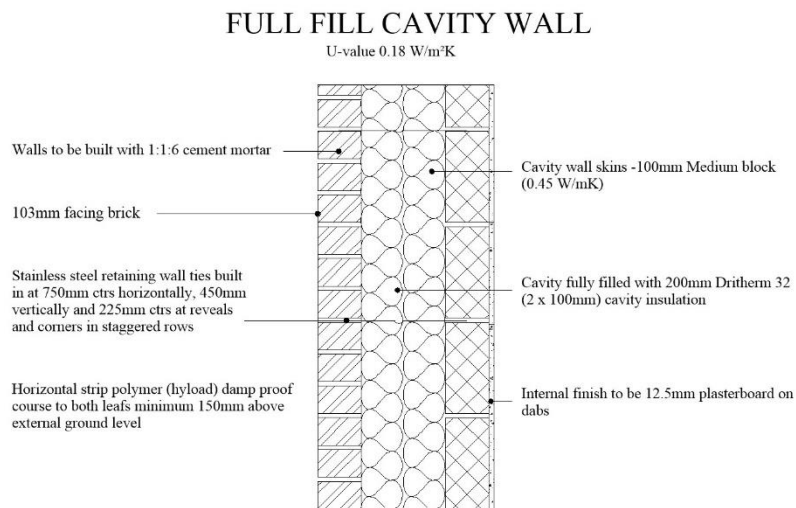


Fig. 8 Full fill cavity wall (Not to Scale)

Full Fill Cavity Wall

To achieve minimum U Value of 0.18 W/m²K

New cavity wall to comprise of 103mm suitable facing brick. Full fill cavity with 175mm Rockwool Cavity insulation as manufacturer's details. Inner leaf to be 100mm medium block, 0.45 W/m²K. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

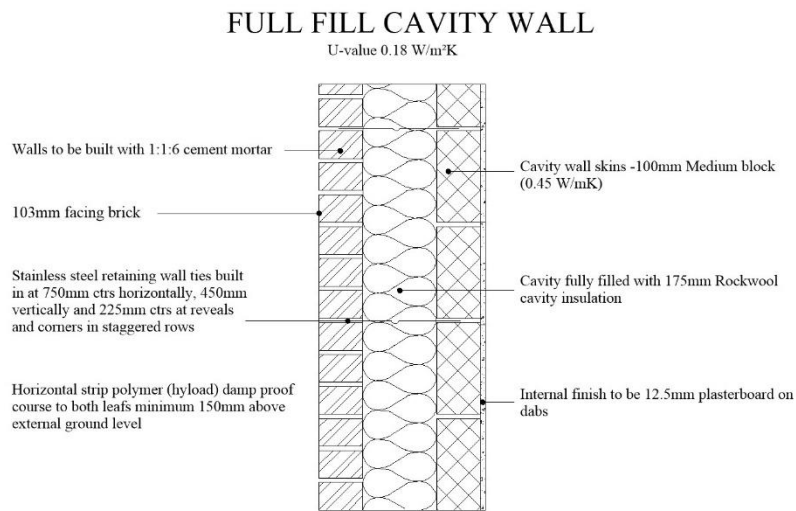


Fig. 9 Full fill cavity wall (Not to Scale)

PARTIAL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K

Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 100mm Celotex CW4000 insulation fixed to internal leaf constructed of 100mm, 0.45 W/m²K standard block. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

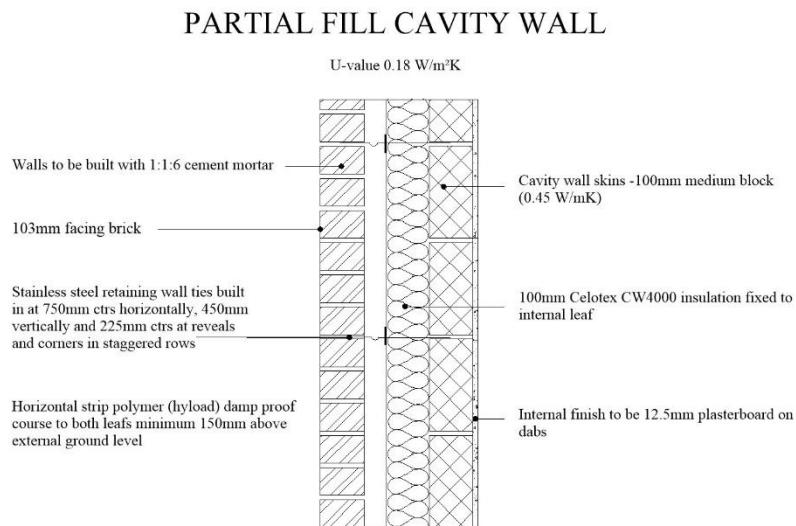


Fig. 10 Partial fill cavity wall (Not to Scale)

PARTIAL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K

Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 100mm Ecotherm Eco-Cavity insulation fixed to internal leaf constructed of 100mm, 0.45 W/m²K standard block. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

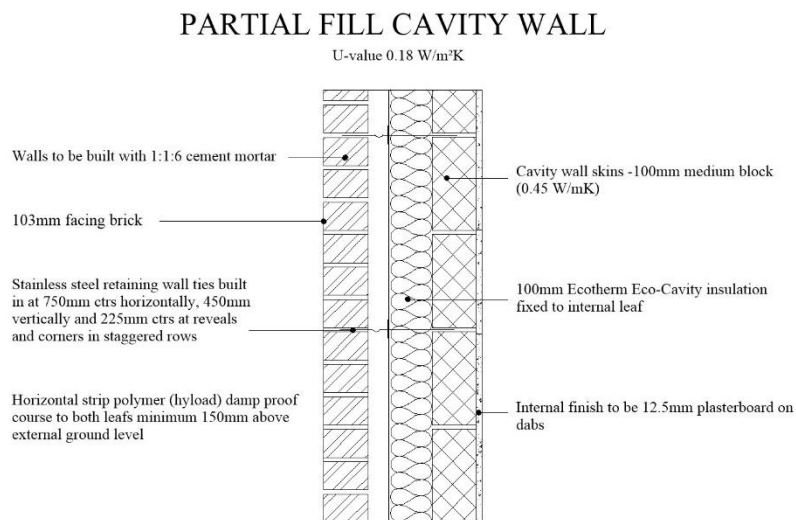


Fig. 11 Partial fill cavity wall (Not to Scale)

PARTIAL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K

Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 80mm Kingspan Kooltherm insulation fixed to internal leaf constructed of 100mm, 0.45 W/m²K standard block. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

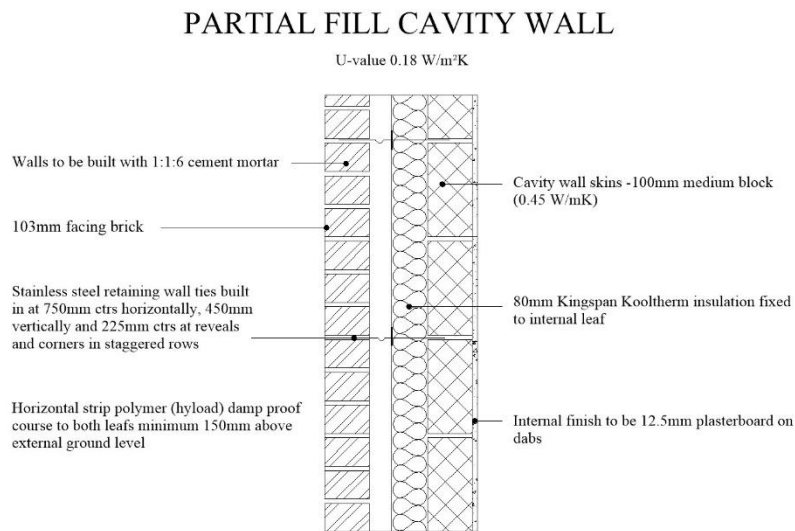


Fig. 12 Partial fill cavity wall (Not to Scale)

PARTIAL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K

Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 100mm Xtratherm SR/CW insulation fixed to internal leaf constructed of 100mm, 0.45 W/m²K standard block. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

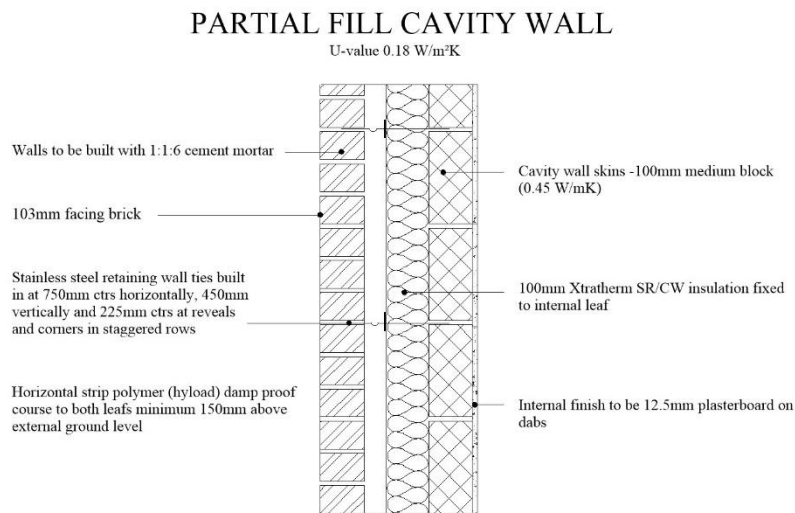


Fig. 13 Partial fill cavity wall (Not to Scale)

FULL FILL CAVITY WALL WITH INTERNAL INSULATION

To achieve minimum U Value of 0.18 W/m²K

New cavity wall to comprise of 105mm suitable facing brick. Full fill the cavity with 100mm Rockwool Cavity insulation as manufacturer's details and provide 50mm PIR insulation over vcl, e.g. Celotex GA4000 internally. Inner leaf constructed using 100mm standard block, 0.45 W/m²K. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

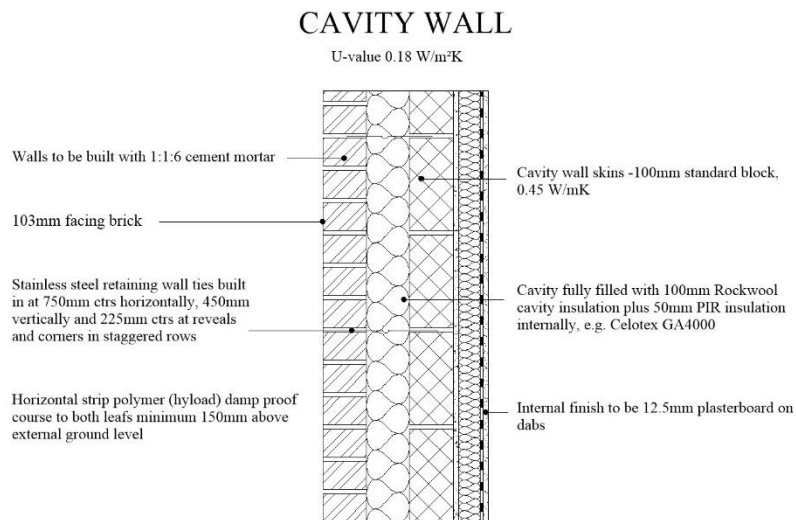


Fig. 14 Full fill cavity wall with internal insulation (Not to Scale)

PARTIAL FILL CAVITY WALL WITH INTERNAL INSULATION

To achieve minimum U Value of 0.18 W/m²K

Provide 103mm suitable facing brick. Ensure a 50mm clear residual cavity and provide 50mm Celotex CW4000 insulation fixed to internal leaf constructed of 100mm, 0.45 W/m²K standard block. Provide additional 50mm PIR insulation over vcl, e.g. Celotex GA4000 internally.

Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

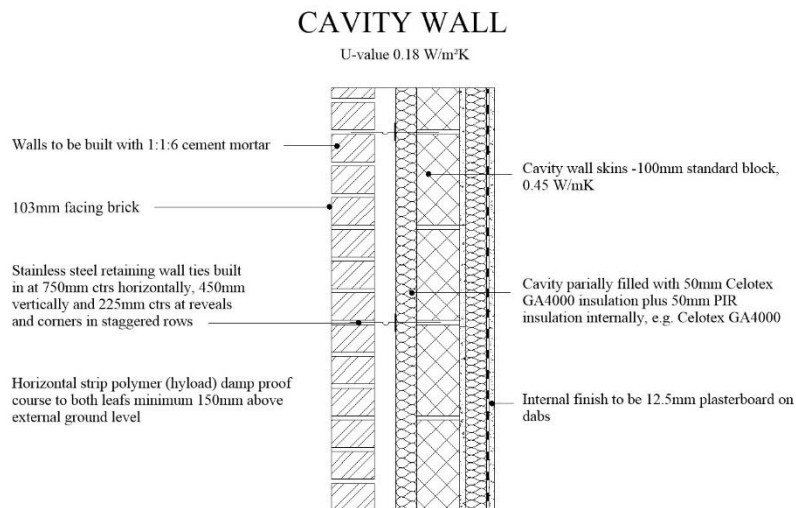


Fig. 15 Partial fill cavity wall with internal insulation (Not to Scale)