### 1:10 @ A4 Case Study\_OP23\_Treviana Social Housing\_Spain Scale Nuria Díaz/Anne Vogt Author EWCB External wall construction beam. Vertical section. 07.07.2015 Date **EXISTING COLOR CODE** Existing building Brick stonework Air chamber Step 1 Brick stonework Step 2 Plaster Step 3 - Timber flooring Mortar Step 4 Reinforced concrete floor structure temporary works (in between steps) Airtight layer DESCRIPTION/CHALLENGES No insulation. The sole responsibility for the content of this publication lies with the authors. It does not necessarily **EuroPHit** Co-funded by the Intelligent Energy Europe reflect the opinion of the European Union. Neither the EACI nor the European Commission are Programme of the European Union responsible for any use that may be made of the information contained therein.

# 1:10 @ A4 Case Study\_OP23\_Treviana Social Housing\_Spain Scale Author Nuria Díaz/Anne Vogt EWCB Exterior wall construction beam. Vertical section. - THERM 07.07.2015 Date Existing **COLOR CODE** DESCRIPTION/CHALLENGES No insulation. $\Psi$ - value [W/mK] = 0.894 The sole responsibility for the content of this publication lies with the authors. It does not necessarily **EuroPHit** Co-funded by the Intelligent Energy Europe reflect the opinion of the European Union. Neither the EACI nor the European Commission are Programme of the European Union responsible for any use that may be made of the information contained therein.

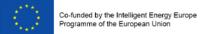
#### 1:10 @ A4 Scale Case Study\_OP23\_Treviana Social Housing\_Spain Nuria Díaz/Anne Vogt Author E DIFICACIÓN PASSIVHAU EWCB Exterior wall construction beam. Vertical section. Date 07.07.2015 1 STEP COLOR CODE Brick stonework Waterproofing mortar Rockwool insulation Existing building Air chamber Step 1 Barrier layer and air tightness layer Systems Step 2 Plasterboard Step 3 Timber flooring Mortar Step 4 Reinforced concrete floor structure temporary works (in between steps) Airtight layer DESCRIPTION/CHALLENGES The interior insulation thickness chosen is 4 cm to reduce the demand as far as possible but above all to increase the surface temperature, raise the comfort, and reduce surface condensation risk. Since the existing floor finished has not been removed due to its good quality, airtightness layer is not continue. The sole responsibility for the content of this publication lies with the authors. It does not necessarily **EuroPHit** Co-funded by the Intelligent Energy Europe reflect the opinion of the European Union. Neither the EACI nor the European Commission are Programme of the European Union

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## 1:10 @ A4 Scale Case Study\_OP23\_Treviana Social Housing\_Spain PLATAFORMA Nuria Díaz/Anne Vogt Author EWCB Exterior wall construction beam. Vertical section. - THERM Date 07.07.2015 Step 1 **COLOR CODE** DESCRIPTION/CHALLENGES The interior insulation thickness chosen is 4 cm to reduce the demand as far as possible but above all to increase the surface temperature, raise the comfort, and reduce surface condensation risk. Since the existing floor finished has not been removed due to its good quality, airtightness layer is not continue. $\Psi$ - value [W/mK] = 1.065 The sole responsibility for the content of this publication lies with the authors. It does not necessarily **EuroPHit** Co-funded by the Intelligent Energy Europe reflect the opinion of the European Union. Neither the EACI nor the European Commission are Programme of the European Union responsible for any use that may be made of the information contained therein.

### 1:10 @ A4 Case Study\_OP23\_Treviana Social Housing\_Spain Scale Nuria Díaz/Anne Vogt Author EWCB Exterior wall construction beam. Vertical section. 07.07.2015 Date 2 STEP (a) **COLOR CODE** Existing building Step 1 Reinforced concrete floor structure Step 2 Step 3 Step 4 temporary works (in between steps) Airtight layer DESCRIPTION/CHALLENGES Brick stonework Air chamber Brick stonework Plaster The sole responsibility for the content of this publication lies with the authors. It does not necessarily **EuroPHit** Co-funded by the Intelligent Energy Europe reflect the opinion of the European Union. Neither the EACI nor the European Commission are Programme of the European Union responsible for any use that may be made of the information contained therein.

## 1:10 @ A4 Scale Case Study\_OP23\_Treviana Social Housing\_Spain Author Nuria Díaz/Anne Vogt EWCB Exterior wall construction beam. Vertical section. - THERM Date 07.07.2015 Step 2 (a) COLOR CODE DESCRIPTION/CHALLENGES This detail does not include the first step measure developed in ONE apartment. The exterior insulation thickness chosen is 10 cm according to the PHPP calculations. This measure will reduce the thermal bridge, increase the surface temperature, raise the comfort, and eliminate surface condensation risk. $\Psi$ - value [W/mK] = The airtight layer will be on the exterior of the existing wall. The sole responsibility for the content of this publication lies with the authors. It does not necessarily



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## Case Study\_OP23\_Treviana Social Housing\_Spain

Scale 1:10 @ A4

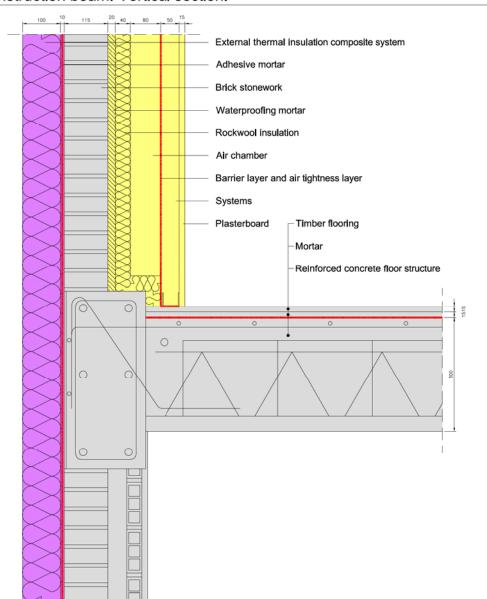
Author Nuria Díaz/Anne Vogt

Date 07.07.2015



EWCB Exterior wall construction beam. Vertical section.

2 STEP (b)





Existing building

Step 1

Step 2

Step 3

Step 4

\_\_\_\_ temporary works (in between steps)

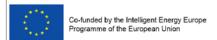
#### Airtight layer

#### DESCRIPTION/CHALLENGES

This detail include the first step measure developed in ONE apartment.

The exterior insulation thickness chosen is 10 cm according to the PHPP calculations. This measure will reduce the thermal bridge, increase the surface temperature, raise the comfort, and eliminate surface condensation risk.

The airtight layer will be on the exterior of the existing wall.



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## 1:10 @ A4 Case Study\_OP23\_Treviana Social Housing\_Spain Scale PLATAFORMA Author Nuria Díaz/Anne Vogt EWCB Exterior wall construction beam. Vertical section. - THERM 07.07.2015 Date Step 2 (b) COLOR CODE DESCRIPTION/CHALLENGES This detail include the first step measure developed in ONE apartment. The exterior insulation thickness chosen is 10 cm according to the PHPP calculations. This measure will reduce the thermal bridge, increase the surface temperature, raise the comfort, and eliminate surface condensation risk. $\Psi$ - value [W/mK] = 0,064 The airtight layer will be on the exterior of the existing wall. The sole responsibility for the content of this publication lies with the authors. It does not necessarily **EuroPHit** Co-funded by the Intelligent Energy Europe reflect the opinion of the European Union. Neither the EACI nor the European Commission are

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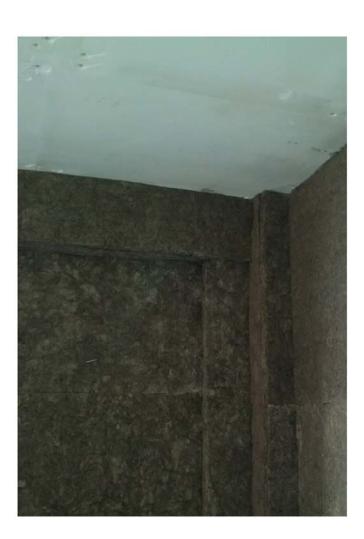
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## Case Study\_OP23\_Treviana Social Housing\_Spain

EWCB External wall construction beam. Vertical section.

BEFORE 1ST STEP





### DESCRIPTION/CHALLENGES

1:10 @ A4 Nuria Díaz/Anne Vogt

07.07.2015

Scale

Author

Date

The interior insulation thickness chosen is 4 cm to reduce the demand as far as possible but above all to increase the surface temperature, raise the comfort, and reduce surface condensation risk.



