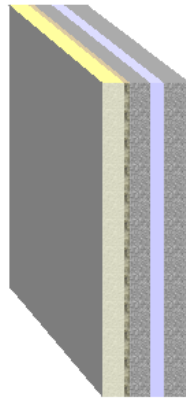


Source: **own catalogue - Own**  
Component: **Typical Dyke Property**

OUTSIDE

INSIDE



Assignment: External wall

|                                     | Manufacturer | Name          | Thickness<br>[m], number | Lambda<br>[W/(mK)] | Q        | R<br>[m²K/W]                |
|-------------------------------------|--------------|---------------|--------------------------|--------------------|----------|-----------------------------|
|                                     |              | Rse           |                          |                    |          | 0.04                        |
| <input checked="" type="checkbox"/> | 1            | WBS           | 0.008                    | 0.556              | <b>E</b> | 0.01                        |
| <input checked="" type="checkbox"/> | 2            | WBS           | 0.080                    | 0.027              | <b>E</b> | 2.96                        |
|                                     |              | Fixings       | 8/m²                     | 0.500              | <b>D</b> | -                           |
|                                     |              | Air gaps      |                          |                    |          | Level 1: dU" = 0.01 W/(m²K) |
| <input checked="" type="checkbox"/> | 3            | Own catalogue | 0.020                    | 1.000              | <b>E</b> | 0.02                        |
| <input checked="" type="checkbox"/> | 4            | Own catalogue | 0.075                    | 0.833              | <b>E</b> | 0.09                        |
| <input checked="" type="checkbox"/> | 5            | Own catalogue | 0.050                    | 0.278              | <b>E</b> | 0.18                        |
| <input checked="" type="checkbox"/> | 6            | Own catalogue | 0.075                    | 0.833              | <b>E</b> | 0.09                        |
| <input checked="" type="checkbox"/> | 7            | Own catalogue | 0.013                    | 0.250              | <b>E</b> | 0.05                        |
|                                     |              | Rsi           |                          |                    |          | 0.13                        |
|                                     |              |               |                          |                    |          | <b>0.321</b>                |

$$R_T = R_{si} + \sum R_i + R_{se} = 3.58 \text{ m}^2\text{K/W}$$

| Correction to U-value for  | according to           | delta U<br>[W/(m²K)] |
|--|------------------------|----------------------|
| Mechanical fasteners   | BS EN ISO 6946 Annex D | 0.000                |
| Air gaps   | BS EN ISO 6946 Annex D | 0.007                |
| <i>Air gaps and fixings corrections need not be applied, as their total effect is less than 3% (Annex D BS 6946:1996).</i> |                        | 0.000                |

$$U = 1/R_T + \sum \Delta U = 0.28 \text{ W}/(\text{m}^2\text{K})$$

- Q .. The physical values of the building materials has been graded by their level of quality. These 5 levels are the following
- A** .. A: Data is entered and validated by the manufacturer or supplier. Data is continuously tested by 3rd party.
  - B** .. B: Data is entered and validated by the manufacturer or supplier. Data is certified by 3rd party
  - C** .. C: Data is entered and validated by the manufacturer or supplier.
  - D** .. D: Information is entered by BuildDesk without special agreement with the manufacturer, supplier or others.
  - E** .. E: Information is entered by the user of the BuildDesk software without special agreement with the manufacturer, supplier or others.

$$U_{\max} = \boxed{0.35 \text{ W}/(\text{m}^2\text{K})}$$

$$U = \boxed{0.28 \text{ W}/(\text{m}^2\text{K})} \quad R_T = \boxed{3.58 \text{ m}^2\text{K/W}}$$

Source of U<sub>max</sub> value: England, Wales: Approved Document L1A (2006), Table 2 - New Build Dwellings

Calculated with BuildDesk 3.4.4