Certificate

Certified Passive House component
for cool, temperate climate, valid until 31.12.2025

Passive House Institute
64283 Darmstadt
GERMANY

Category: **Facade anchor**
Manufacturer: **Ash & Lacy**
West Bromwich, UNITED KINGDOM
Product name: **AxiAL AXR System**

The following criteria were used in awarding this certificate:

Efficiency Criterion

In a typical application*, the construction fulfills the requirements of

Eff.fa ≤ 0.200 W/(kNK)

Comfort Criterion

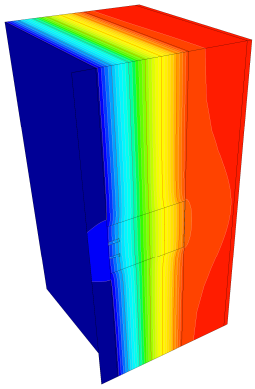
The inner surface must be warm enough to prevent mold as well as uncomfortable down-drafts and radiation losses.

$\theta_{i,min}$ ≥ 17°C

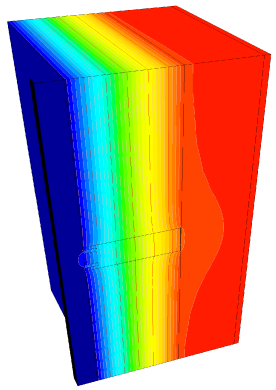
Thermal data of the certified component

Product name	Thermal bridge coefficient χ [W/K]	Minimum interior surface temperature $\theta_{i,min}$ [°C]
Fixed point	0.0241	19.02
Sliding point	0.0123	19.07

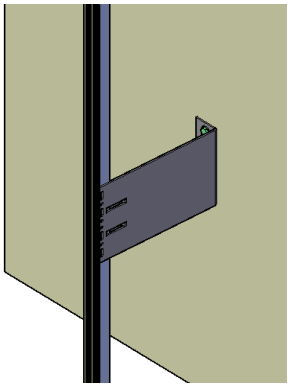
* The criterion has been validated with a representative facade of a school building



Isothermal map fixed point



Isothermal map sliding point



Representation

cool, temperate climate

ph B

CERTIFIED COMPONENT

Passive House Institute

www.passivehouse.com

2045fa03

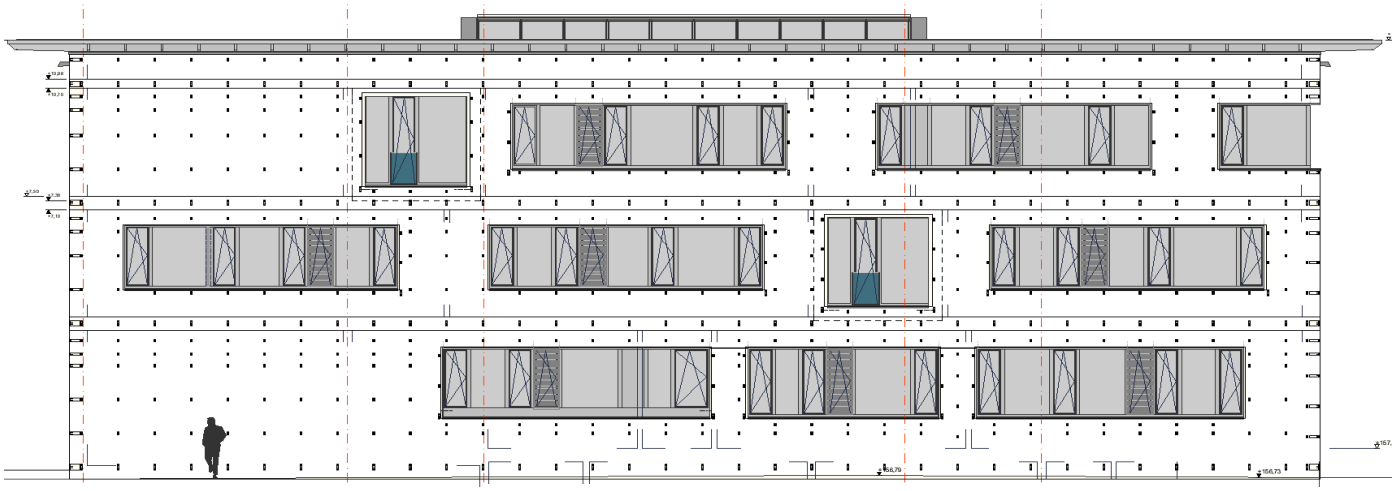
Data sheet Ash & Lacy, AxiAL AXR System

Manufacturer Ash & Lacy
Bromford Lane, B70 7JJ West Bromwich
www.ashandlacy.com

Criteria validated based on reference facade	Δ_U [W/m²K]
LC I	0.0197
LC II	0.0288
LC III - VI	0.0368

In order to validate the suitability, the manufacturer provides a statical calculation and an associated installation plan for the reference facade.
The calculations are carried out for a reference facade with 24 cm insulation (0.035 W/(mK)). To achieve a heat transfer coefficient of $U_{effective}$ = 0.15 W / m²K, an additional insulation thickness of 1 cm becomes necessary.

Load class	Efficiency	ΔU	Quantity / m²	
LC	[W/(kNK)]	[W/m²K]	SP	FP
I	**0.1970**	0.0197	0.37	0.88
II	**0.1922**	0.0288	0.53	1.31
V	**0.1233**	0.0370	0.85	1.35
VI	**0.0660**	0.0370	0.85	1.35



Installation-plan reference facade of the certified component (LC II)

Load-class (LC)	Facade cladding	Facade weight [kN/m²]	Efficiency criterion fulfilled?
I	Aluminium	0.10	yes
II	ACM	0.15	yes
III	Fiber-cement plates	0.20	yes
IV	Acrylic glass	0.25	yes
V	Ceramics	0.30	yes
VI	Brick-slip	0.56	yes

The classification criteria and the load class allocation can be found in the current criteria "Certified Passive House components – Facade anchors, Version 2.1, 27.05.2021".