

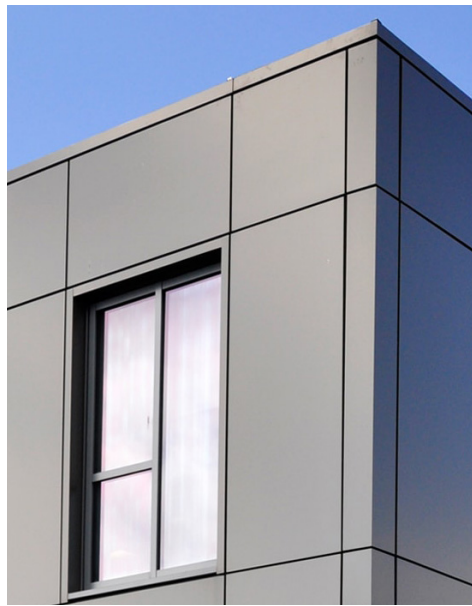


EXISTING STRUCTURAL CONCRETE

Prior to the recladding works carried out in 2006-08, the 5 towers in the Chalcots estate had an exposed structural concrete exterior. Whilst this type of construction and finish were common at the time of original construction (1960s), they do not perform well at insulating relative to modern alternatives.

By taking down the ACM cladding panels and mineral wool insulation, the towers are likely to suffer from cold bridging and water ingress issues due to the loss of an external rain screen surface and insulation. Furthermore heating systems installed in 2006-08 may not be able to sufficiently heat the flats that have significantly reduced insulation.

The window system also installed as part of the recladding works in 2006-08, were installed using aluminium angles fixed to the outside face of the concrete façade. If left uninsulated these will act as a cold bridge, and will also require a weatherproofing solution in case of driving rain.



SOLID ALUMINIUM PANEL

Fire Rating Class A1 or A2 (EN 13501, non-combustible or limited combustibility)

U-value¹ 0.4 W/m²K for Blashford
0.39 W/m²K for rest (same as existing)

Weight² 12 kg/m²

Depth 217mm from concrete
+37mm relative to existing
3mm thick panel

Size 2.6m storey height x various (3.6 x 1.3m max)

Product Life 30 years

Compatible with future glazing replacement
Yes



RENDERED INSULATION

Fire Rating Class A2 (EN 13501, limited combustibility)

U-value¹ 0.18 W/m²K for all 5 towers

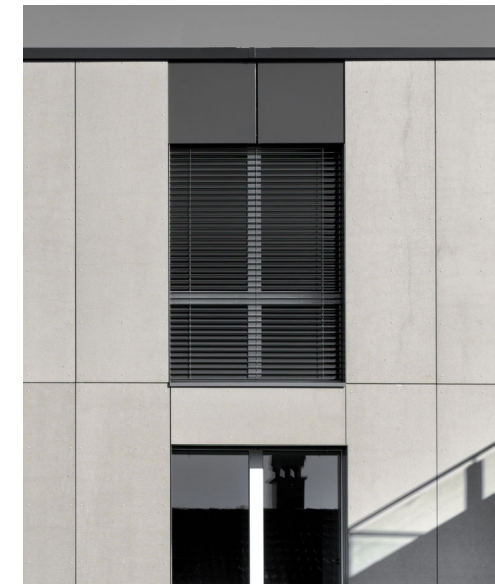
Weight² 20 kg/m²

Depth 192mm from concrete
+12mm relative to existing
180mm of insulation
12mm of render and substrate

Size n/a

Product Life 30 years

Compatible with future glazing replacement
Yes



GLASS-REINFORCED CONCRETE PANEL

Fire Rating Class A1 or A2 (EN 13501, non-combustible or limited combustibility)

U-value¹ 0.4 W/m²K for Blashford
0.39 W/m²K for rest (same as existing)

Weight² 35 kg/m²

Depth 214mm from concrete
+34mm relative to existing
13mm thick panel

Size 2.6m storey height x various (3.6 x 1.2m max)

Product Life 30 years

Compatible with future glazing replacement
Yes

1. Existing cladding U-value is 0.4 W/m²K for Blashford, and 0.39 W/m²K for Bray, Burnham, Dorney and Taplow

2. Existing cladding weight is 5.5 kg/m²

