Sample Sign-Off Document

Glass Sample					**Record Sheet**
Date Accepted:	10.09.2019	Project:	Kings Cross P2	**Location: (level, grid ref)**	Façade
Drawing Reference:	KXC-P2-001-Y-LFL-21-SA-0001			**Specification Reference:**	21.2.1 21.2.2
	KXC-P2-001-Y-FMDC-21-904				

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P01

Double Glazed Units within unitised façade to upper floors - levels 1- 9 mezzanine

KIER

Façade Glass

Description:

6.22 Annealed Low Iron/ 16 / 55.2 Annealed Low Iron

Double Glazed

Location:

Façade

FMDC Specification Reference: KXC-FMDC-P2- Stage 3 Specification_ISSUE 1

Please see Specification Attached to this document and specific product referenced below.

External Wall Systems	Thermal Transmittance (W/m^2K)
EWS 200 (double glazed)	1.45

Type	Visible Light Transmittance (LT)*	Total Solar Energy Transmittance (g-value)
Type 200	Maximise (No less than 55%)	≤ 0.33

Sample Sign-Off Document

Lindner Sample Sheet

Transmittance, reflectance, absorption

ρ_V = 0,10 (external light reflectance)	T_{UV} = **0,00** (ultraviolet transmittance)		
ρ'_V = 0,12 (internal light reflectance)	**T_V = 0,61** (light transmittance)		
ρ_e = 0,31 (external solar direct reflectance)	**T_e = 0,31** (solar direct transmittance)		
ρ'_e = 0,35 (internal solar direct reflectance)	R_a = 93 (general colour rendering index)		

α_e 1 = 0,38; 3 = 0,01 (solar direct absorptance)

EN 410

SC = 0,38 (Shading Coefficient, g/0,87)	**q_i = 0,02** (secondary internal heat transfer factor)		
b-Factor = 0,41 (VDI 2078, g/0,80)	**g = 0,33** (total solar energy transmittance (solar factor))		
EN 673 Installation angle = 90° vertical	**U_g = 1,0 W/m²K** (heat flow coefficient)		

EN ISO 52022-3 T_e = 5,00 °C T_i = 20,00 °C E_S = 300,00 W/m² System height = 1,50 m

g_{th} = 0,014 (thermal radiation factor)	$h_{c,e}$ = 18,00 W/m²K	$h_{c,i}$ = 3,60 W/m²K
g_c = 0,010 (convection factor)	**q_i = 0,025** (secondary internal heat transfer factor)	
g_v = 0,000 (ventilation factor)	**g = 0,33** (total solar energy transmittance (solar factor))	

Lindner Report Reference:

KXC-P2-001-Y-LFL-21-SA-0001

FDMC Specification Reference:

KXC-P2-001-Y-FMDC-21-904

KIER

Sample Sign-Off Document

Male Mullion					Record Sheet
Date Accepted:		Project:	P2 Kings Cross	**Location: (level, grid ref)**	Façade – Aluminium Spandrel
Drawing Reference:	KXC-P2-001-Y-LFL-21-2832			**Specification Reference:**	21.3.2 13.3.1 - Lindner

Male Mullion

Description:

Male Mullion

Finish: FI22 – PPC RAL 5004 30% gloss (internal use; Qualicoat 1 / FI22 – PPC RAL 5004 30% gloss external use; Qualicoat 2)

Location

Façade – Aluminimum Spandrel. Please refer to drawing.

Lindner Specification Reference: 13.3.1

Please see Specification Attached to this document and specific product referenced below.

Lindner Report Reference:

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P02 /a

Aluminum PPC extrusions - Male Mullion

KIER

Sample Sign-Off Document

Top Transom					Record Sheet
Date Accepted:		Project:	P2 Kings Cross	**Location: (level, grid ref)**	Façade - Loggia Through Beams
Drawing Reference:	KXC-P2-001-Y-LFL-21-2253			**Specification Reference:**	21.3.2 13.3.1 - Lindner

Top Transom

Description:

Top Transom

Finish: FI22 – PPC RAL 5004 30% gloss (internal use; Qualicoat 1 / FI22 – PPC RAL 5004 30% gloss external use; Qualicoat 2)

Location

Façade - Loggia Through Beams. Refer to Drawing.

Lindner Specification Reference: 13.3.1

Please see Specification Attached to this document and specific product referenced below.

Lindner Report Reference:

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P02 /b

Aluminum PPC extrusions - Top Transom

KIER

Sample Sign-Off Document

Intermediate Transom					Record Sheet
Date Accepted:		Project:	P2 Kings Cross	**Location: (level, grid ref)**	Top of Windows (Internal)
Drawing Reference:	KXC-P2-001-Y-LFL-21-2627			**Specification Reference:**	21.3.2 13.3.1 - Lindner

Intermediate Transom (top)

Description:

Intermediate Transom (top)

Finish: FI22 – PPC RAL 5004 30% gloss (internal use; Qualicoat 1 / FI22 – PPc RAL 5004 30% gloss (external use; Qualicoat 2)

Location

Top of Windows (Internal)

Lindner Specification Reference: 13.3.1

Please see Specification Attached to this document and specific product referenced below.

Lindner Report Reference:

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P02 /c

Aluminum PPC extrusions - Intermediate Transom

KIER

Sample Sign-Off Document

Bottom Transom					**Record Sheet**
Date Accepted:		Project:	P2 Kings Cross	**Location: (level, grid ref)**	Façade - Loggia Through Beams
Drawing Reference:	KXC-P2-001-Y-LFL-21-2253			**Specification Reference:**	21.3.2 13.3.1 - Lindner

Bottom Transom

Description:

Profile Sample – Bottom Transom

Finish: PPC RAL 5004 30% gloss (internal ise; Qualicoat 1 / FI22 – PPC RAL 5004 30% gloss (external use; Qualicoat 2)

Location

Façade - Loggia Through Beams. Refer to drawing.

Lindner Specification Reference: 13.3.1

Please see Specification Attached to this document and specific product referenced below.

Lindner Report Reference:

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P02 /d

Aluminum PPC extrusions - BottomTransom

KIER

Sample Sign-Off Document

Feature Profile (Picture Frame)					Record Sheet
Date Accepted:		Project:	P2 Kings Cross	**Location: (level, grid ref)**	Façade – Capping on perimeter of windows and louvres
Drawing Reference:	KXC-P2-001-Y-LFL-21-2815 KXC-P2-001-Y-LFL-21-411			**Specification Reference:**	21.3.2 13.3.1 - Lindner

Feature Profile (Picture Frame)

Description:

Feature Profile (Picture Frame)

Finish: FI22 – PPC RAL 5004 30% gloss (external use; Qualicoat 2)

Location

Façade – Capping on perimeter of windows & louvers. Refer to drawings.

Lindner Specification Reference: 13.3.1

Please see Specification Attached to this document and specific product referenced below.

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P02 /e

Aluminum PPC extrusions - Picture Frame

KIER

Sample Sign-Off Document

Glazing Bead					**Record Sheet**
Date Accepted:		Project:	P2 Kings Cross	**Location: (level, grid ref)**	Capping between windows from Male & Female mullions
Drawing Reference:	KXC-P2-001-Y-LFL-21-2811			**Specification Reference:**	21.3.2 13.3.1 - Lindner

Glazing Bead

Description:

Glazing Bead

Finish: FI22 – PPC RAL 5004 30% gloss (exernal use; Qualicoat 2)

Location

Capping between windows from Male & Female mullions. Refer to drawing.

Lindner Specification Reference: 13.3.1

Please see Specification Attached to this document and specific product referenced below.

Lindner Report Reference:

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P02 /f

Aluminum PPC extrusions - Glazing Bead

KIER

Sample Sign-Off Document

Terracotta Tile Sample					**Record Sheet**
Date Accepted:		Project:	P2 Kings Cross	**Location: (level, grid ref)**	Façade Levels 1-9
Drawing Reference:	KXC-FMDC-P2- Stage 3 Specification_ISSUE 1 KXC-P2-001-Y-LFL-21-SA-0004 KXC-P2-001-Y-LFL-21-TS017 See All Additional Drawings Attached to Sign Off Form			**Specification Reference:**	21.1.0

Terracotta Tile Sample

Description:

Façade terracotta spandrel element

Location:

Façade of building Levels 1-9

FMDC Specification Reference: 20.1.1

Please see Specification Attached to this document and specific product referenced below.

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P03

Terracotta Tile

KIER

Sample Sign-Off Document

20 Terracotta

20.1 Material

20.1.1 General

Terracotta shall be a frost resistant material suitable for exterior application with a uniform texture free from voids or inclusions.

20.1.2 Product standard

Terracotta shall be CE marked in accordance BS EN 14411.

20.1.3 Properties

Terracotta shall have the following properties in accordance with BS EN 771-1 and BS EN ISO 10545:

a) BS EN 771-1: S2 (low).

b) BS EN ISO 10545-2. Refer to 19.5.3.

c) BS EN ISO 10545-3: Water absorption: < 10%*.

d) BS EN ISO 10545-4: >9N/mm²*.

e) BS EN ISO 10545-8: nominally 7-7.5x10^{6}/1K.

f) BS EN ISO 10545-9: No damage.

g) BS EN ISO 10545-10: <0.06%.

h) BS EN ISO 10545-11: No crazing visible from 1m.

i) BS EN ISO 10545-12: No damage.

j) BS EN ISO 10545-15: Declare values.

k) BS EN ISO 10545-16: ΔEcmc < 0.75 unless colour difference is agreed through the submission of colour control samples in accordance with clause 19.3.

*Guideline values typically expected of terracotta suitable for use in external wall cladding. The strength of the material shall be sufficient to meet the Sub-Contractor's design.

20.2 Finish

20.2.1 General

The Sub-Contract Works incorporates glazed terracotta to all visible faces.

20.2.2 Glazed terracotta

20.2.2.1 General

A bespoke glaze colour shall be used on all Elevations.

Sample Sign-Off Document

FMDC Report Reference: KXC-FMDC-P2- Stage 3 Specification_ISSUE 1 **Lindner Report Reference:** KXC-P2-001-Y-LFL-21-SA-0004 KXC-P2-001-Y-LFL-21-TS017	

Sample Sign-Offs Document

This sheet is in consideration of the following information:

Referring to sketch KXC-P2-001-18040-A-SK-530 in the appendix, 5 types of finishes and concrete mixes will be used concerning the external façade of the building. The following types of finishes and mixes will be used:

(Please use colours in reference to the sketch presented below for understanding in locations)

Honed finish, white cement with ground aggregates no less than 15-20mm located on upper and lower typical facades of the structure.

5 types of finishes & concrete mixes associated with the following elements:

UPPER AND LOWER TYPICALS, ALL SOFFITS, LOGGIA SIDE WALLS & WEST CORE FACADE:
Honed finish, white cement with ground aggregates no less than 15-20mm. Allow for hydrophobic coatings. Cement pigment and aggregate selection as per Techcrete's sample DRS 1004 H

GF RIBBED PANELS:
Grit blasted finish, white cement with ground aggregates no less than 15-20mm. Ribbed profile to selected bays. Allow for hydrophobic coatings. Cement pigment and aggregate selection as per Techcrete's sample DRS 1004 H.

GF COLUMNS & MAIN ENTRANCE SIDE WALLS:
Grit blasted finish, white cement with ground aggregates no less than 15-20mm. Allow for hydrophobic coatings. Cement pigment and aggregate selection as per Techcrete's sample DRS 1004 H.

GF COLUMN BASE:
Grit blasted finish, dark grey cement with ground aggregates no less than 15-20mm. Allow for hydrophobic coatings. Cement pigment as per Techcrete's sample C321 GB.

BENCH PINTH:
Grit blasted finish, dark grey cement with ground aggregates no less than 15-20mm. Allow for hydrophobic coatings. Cement pigment as per Techcrete's sample C321 GB.

'LUXCRETE' PANELS:
Grit blasted finish, dark grey cement with ground aggregates no less than 15-20mm. Allow for hydrophobic coatings. Cement pigment as per Techcrete's sample C321 GB.

BENCH TOP:
Honed finish applied to all faces of the element, dark grey cement with ground aggregates no less than 15-20mm. Allow for hydrophobic coatings. Cement pigment as per Techcrete's sample C321 GB.

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2018/2628/P - P2 Kings Cross

Sample Approval Sheet P04/a

Honed Finish white cement

Sample Sign-Offs Document

Grit blasted finish, white cement with ground aggregates no less than 15-20mm located on Ground Floor ribbed panels on Eastern Elevation main entrance.

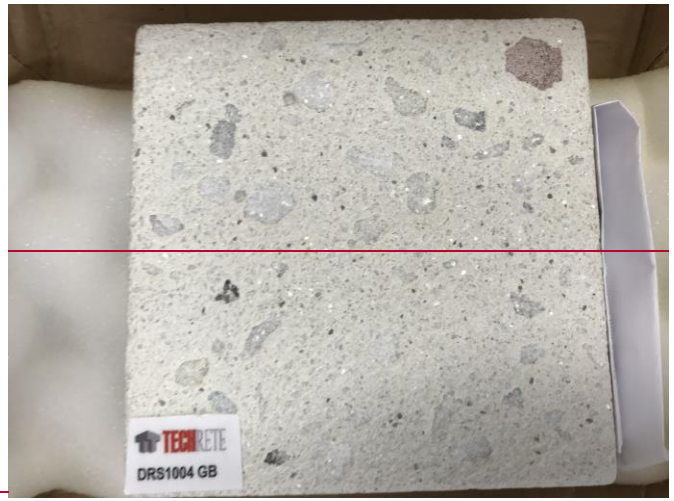
2018/2628/P - P2 Kings Cross

Sample Approval Sheet P04/b

Grit Blasted Finish white cement- Ribbed panels

KIER

Grit blasted finish, white cement with ground aggregates no less than 15-20mm located on Ground Floor Columns and the side walls of the main entrance.
(This material is the same as stated above in the orange)



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2018/2628/P - P2 Kings Cross

Sample Approval Sheet P04/c

Grit Blasted Finish white cement- Columns, Main entrance side walls

Sample Sign-Offs Document

Grit blasted finish, dark grey cement with ground aggregates to less than 15-20mm located on the bases of Ground Floor columns, bench plinths and ‘luxcrete’ panels.

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P04/d

Grit blasted finish dark grey cement - Ground Floor Column bases & Bench plinths

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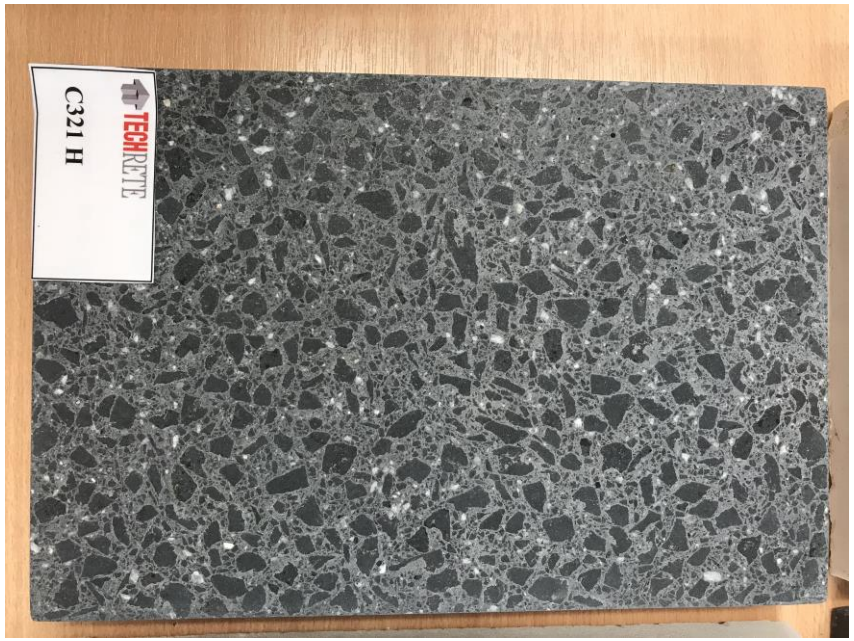
Sample Sign-Offs Document

Honed finish applied to all faces of the element, dark grey cement with ground aggregates no less than 15-20mm located on external bench tops.



For more information on material specifications please look at the stage 3 façade specification as shown in appendix.

2018/2628/P - P2 Kings Cross

Sample Approval Sheet P04/e

Honed finish dark grey cement - Ground Floor bench top

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