



TRAVELODGE HOTEL ALDGATE-LONDON

FULL SCALE FAÇADE
DESIGN AND CONSTRUCTION

Cristofoli
INTERNATIONAL

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OVERVIEW

BESPOKE FAÇADE

This project represents the coming together of a host of products. Extensive use of Cristofoli's light weight stone cladding, terracotta cladding aswell as installation of insulation panelling and window units throughout.



BUILDING FEATURES

Located in the heart of London, this 8 storey building encompasses a number of unique design features. Bladed terracotta elements feature extensively on its southern elevation. Whilst natural limestone clads the main structure in large pre-formed panels. The courtyard area is exclusively clad in a cream white terracotta.

LOCATION

Aldgate, London. Positioned on the corner of Whitechapel High Street.

BUILDING DESCRIPTION

New build, 8 storey, stand alone hotel block. 395 room capacity.

FOOTPRINT

1700m²

FAÇADE COMPOSITION

Light weight natural limestone and terracotta. System supported using an aluminium subframe. SFS infill walling containing windows.

THERMAL AND ACOUSTIC

100mm mineral fibre panel with 200mm Rockwall™ insulation material. Triple glazed windows.

BREEAM RATING

Excellent

FIRE RATING

Excellent. BRE135 certified and approved for both light weight stone and terracotta façades.



FENESTRATION

WINDOW & SFS UNITS

As part of the façade package, the fenestration works were completed throughout the building.

Given its difficult location in central London, achieving minimal site assembly was key. Our solution was to deliver pre-fabricated window and SFS units.



HIGH PERFORMANCE WINDOWS

To meet thermal and acoustic standards, triple glazed windows were used. Framing consisted of a powder coated aluminium exterior and PVC reinforced interior. The net result was an aesthetically pleasing yet highly performing window.

STEEL FRAMING SYSTEM (SFS)

Using an infill framing concept, windows were to be fixed into SFS units. Accurate building surveys provided us confidence that each frame was designed correctly.

ONSITE INSTALATION

Onsite crange positioned wooden frames onto mastclimbers where each unit would be vacuum handled into place.

UNIT ASSEMBLY

Each window was fixed with an EPDM membrane to ensure air and water tightness. Window units were then loaded onto wooden frames and delivered direct to site.



INSULATION

THERMAL & ACOUSTIC

Using a mineral fibre sandwich panel, provided excellent thermal and acoustic performance. Specially designed panels enhanced acoustic absorption yet maintained a comparatively thin cross section, reducing overall weight. Pieces were designed and supplied cut to size, aiding the installation process.



LIGHT WEIGHT STONE

LIMESTONE CLADDING

Using Cristofoli's light weight stone panels was the perfect solution to the weight considerations of the project. Large format panels minimised the joints whilst simplifying the installation programme.



LIMESTONE CLADDING

For this project, the material specified required to have similar visual aesthetics to concrete. Whilst traditional pre-cast concrete was considered, substantial weight implications proved unsuitable for the building superstructure.

KEY FEATURES

- Light Weight Solution
- Limestone material, with similar visual aesthetics to concrete or portland stone

IN-HOUSE DESIGN

Turning the design proposal into useful construction and manufacturing design was completed using our in-house designers and architects. This level of collaboration ensures a thorough understanding for manufacturing and installation.

KEY FEATURES

- Rail support system for 'hanging' cladding panels
- Extensive material testing & supporting static and dynamic loading calculations

UK MANUFACTURED

Cristofoli's Light Weight Stone Panels are manufactured at our UK base. With over 2000m² of material required, our expertise ensured the highest quality on a per piece basis.

KEY FEATURES

- State-of-the-art factory precisely machines each part
- Decorative grooving and drip lines completed in-house removing on-site finishing

CRISTOFOLI INSTALLATION

Each piece is codified and carefully packaged with supporting drawings relating the part to its exact location on the façade. The use of mastclimbers and scissor lifts give installers the means to quickly install as per site conditions.

KEY FEATURES

- Mastclimbers to position each piece
- Supporting drawings advise fitters piece locations

TERRACOTTA

TERRACOTTA CLADDING

To contrast the limestone exterior, a 3 tone glazed terracotta finish was used. Self supported bladed elements feature on the south elevation. Courtyard exterior featured an exclusively cream glazed finish throughout.





PROFILED FINISH

The courtyard, originally specified as a rendered finish, saw terracotta as an attractive solution between cost and aesthetics. Its grooved finish added to the overall look, whilst its low maintenance cost will benefit in the long term.

KEY FEATURES

- Light weight solution with unique finishes
- Low maintenance cost

IN-HOUSE DESIGN

Similar in approach to our light weight stone cladding, the terracotta was entirely designed in-house. This also included the challenging self-supporting bladed elements.

KEY FEATURES

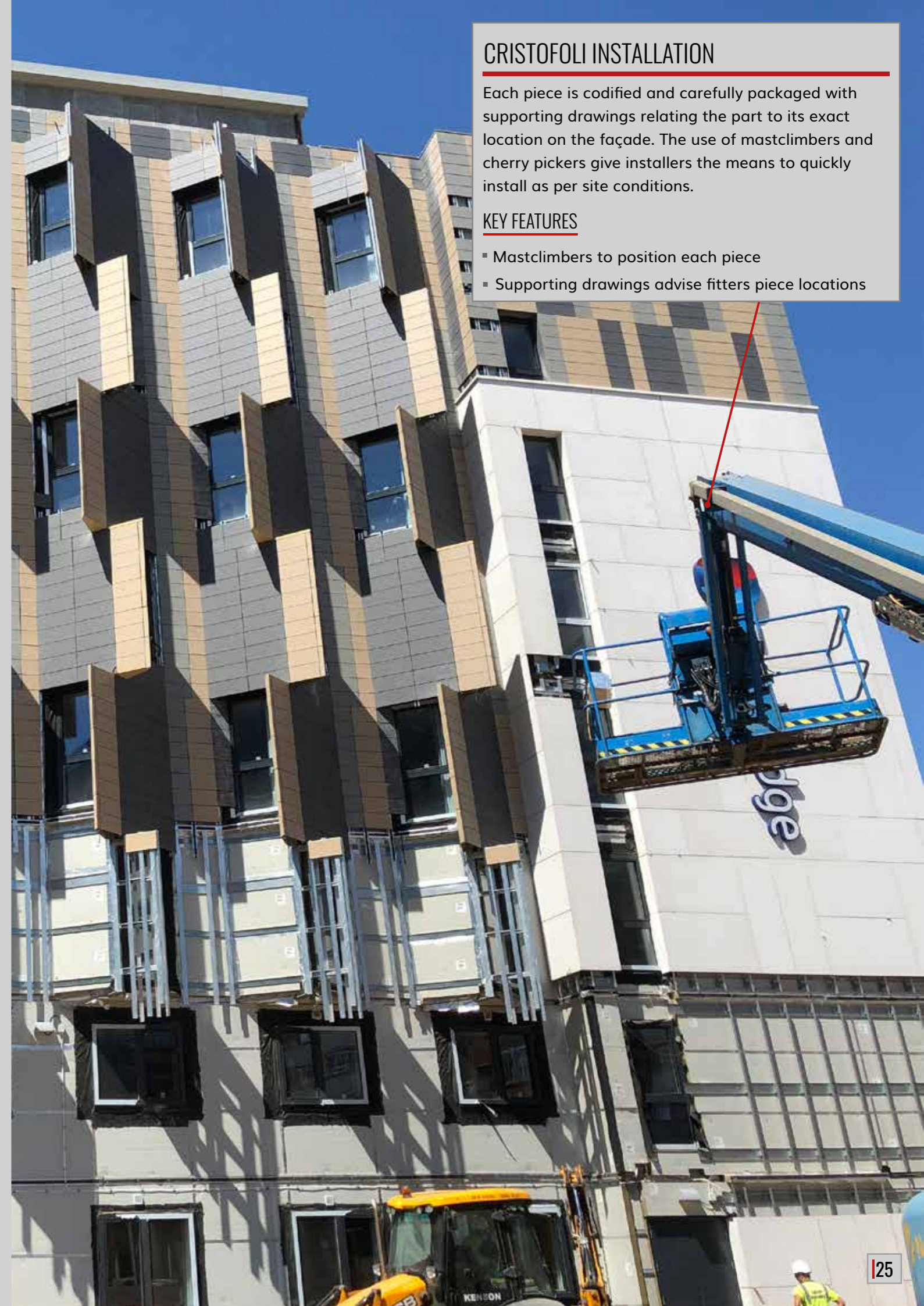
- Rail support system for 'hanging' cladding panels
- Extensive material testing & supporting static and dynamic loading calculations

CRISTOFOLI INSTALLATION

Each piece is codified and carefully packaged with supporting drawings relating the part to its exact location on the façade. The use of mastclimbers and cherry pickers give installers the means to quickly install as per site conditions.

KEY FEATURES

- Mastclimbers to position each piece
- Supporting drawings advise fitters piece locations





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For further information on the services we provide please get in contact.