

City Airport Development Programme (CADP1)

Condition 9: Restrictions on Development Design Code



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1.0 INTRODUCTION

- 1.0.1 The City Airport Development Programme (CADP1) planning application (13/01228/FUL) was granted full planning permission by the Secretaries of State for Communities and Local Government and Transport in July 2016 following an appeal and public inquiry which was held in March/April 2016.
- 1.0.2 This document has been prepared to discharge Condition 9 of Planning Permission 13/01228/FUL which states:
- 1.0.3 **9 - Restrictions on Development (Design Code)**
Prior to the Commencement of Development a Design Code shall be submitted to and approved in writing by the local planning authority. Any new building, extension or alteration to existing buildings proposed at the Airport to be erected by virtue of Class F of Part 8 of Schedule 2 of the Town and Country Planning (General Permitted Development) Order 2015 (or any subsequent variations) shall demonstrate how the proposal accords with the Design Code.
- Reason: To ensure that the appearance of the development and the amenities of the area are not adversely affected.*
- 1.0.4 Class F of Part 8 of Schedule 2 of the Town and Country Planning (GPDO) 2015 (as amended) in this context allows the erection or alteration of a building on the Airport's operational land, provided it is in connection with the provision of services and facilities at the Airport.

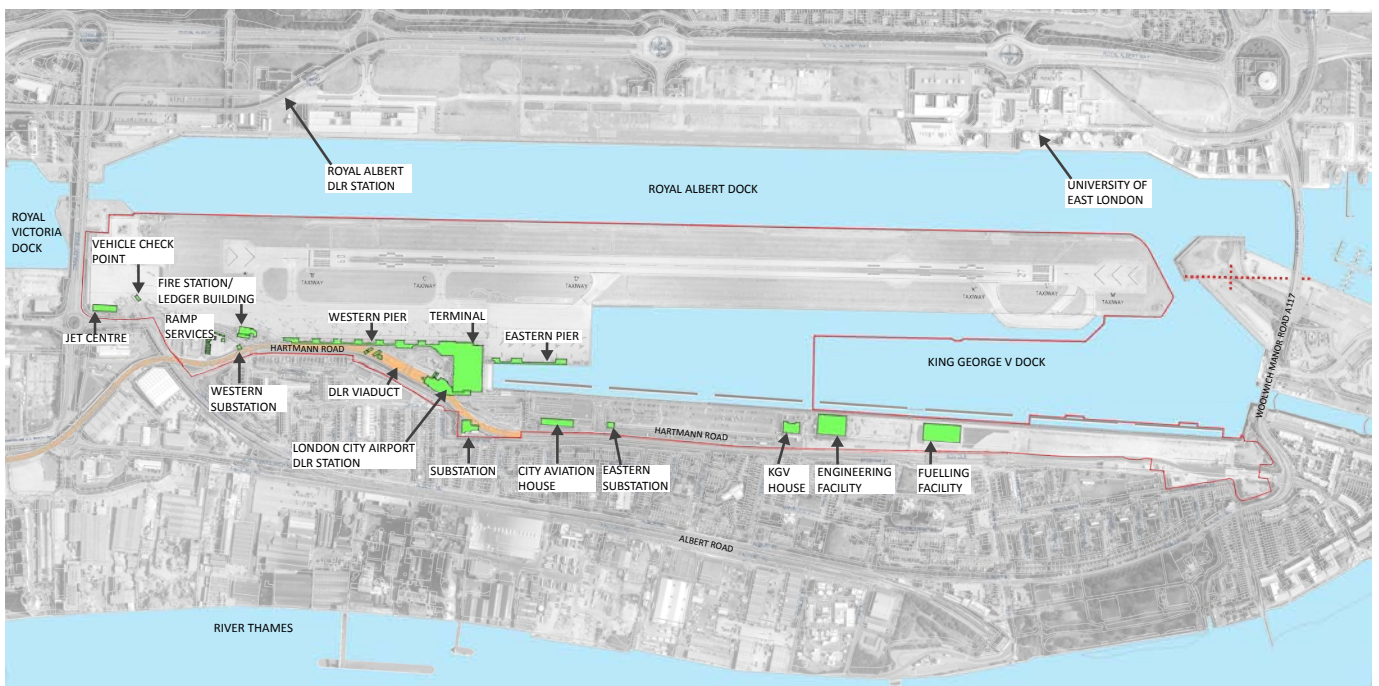


FIGURE 1.1: EXISTING BUILDINGS AT THE AIRPORT

2.0 SCOPE AND PURPOSE

- 2.0.1 This design code is intended to ensure the necessary quality of design is achieved by any permanent extension of, or new operational building erected under Class F or Part 8 through the following areas of guidance:
- Explanation of the CADP1 Concept Design, emphasising a requirement for aesthetic quality and continuity in all future development at the Airport;
 - Formal and Compositional Principles; and
 - Material and Colour Principles.
- 2.0.2 It has been informed by the Design and Access Statement (DAS) approved and subsequent DAS Addendum which accompanied the CADP1 application.
- 2.0.3 Whilst the Design Code applies to all new buildings under Class F, where certain operational requirements dictate it may not be possible to comply with all principles contained within the Design Code. The Design Code does not apply to temporary structures at the Airport and is applicable only to permanent structures. It should be read as a live document which will be subject to future change as is deemed necessary.

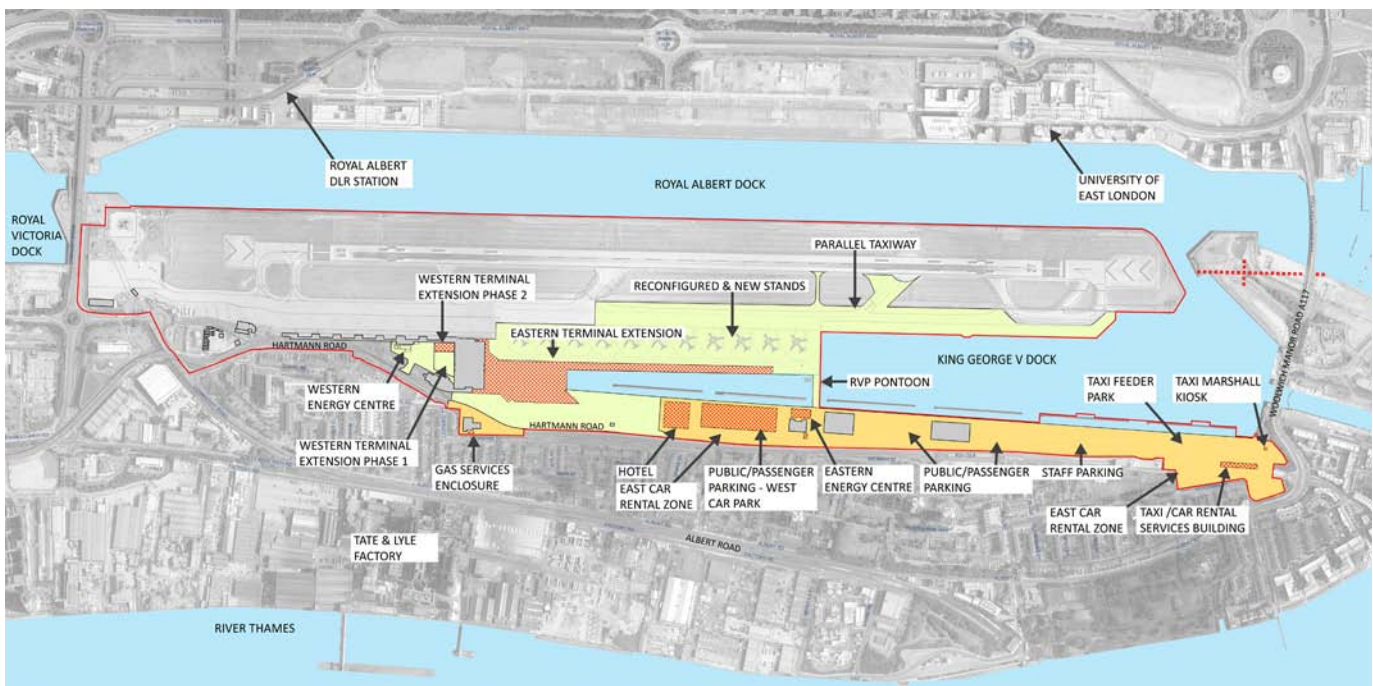


FIGURE 2.1: PROPOSED BUILDINGS AT THE AIRPORT UNDER CADP1.

3.0 CADP DESIGN PRINCIPLES



FIGURE 3.1: HISTORIC IMAGE OF THE DOCKS



FIGURE 3.2: CADP EXTERNAL VISUALISATIONS

- 3.0.1 The Airport serves as a gateway to Newham, London and the United Kingdom. The Airport is a crucial enabler of economic benefit to the borough, city and country. CADP1's design aspirations are necessarily world class given that the Airport is a key part of London's economy, central to the Mayor's Green Enterprise Zone, and also in the context of an improved environment for the local community.
- 3.0.2 Historically, Albert and Victoria Docks served as London's principal dock facilities during the first half of the 20th century, permitting deep draught ships to berth up river. KGV Dock provided berthing for 14 large ships, with formidable transit warehouses and cranes lining the wharfs on the north and south sides. The KGV Dock was constructed specifically to accommodate deep draught 30,000+ imperial ton ships such as the SS Mauretania. When the Docks were operating as a thriving concern it would have been a bustling gateway to the trading world with the drama and associations of commerce with far-flung places.
- 3.0.3 The proposed external expression of the CADP Terminal Extension references the heritage of the Royal Docks and the crude platonic forms of its former industry. From the cargo steamships of the nineteenth century to super-size cruise liners berthing in the twentieth century, these large scale spaces have been replete with similarly large scale objects existing in close adjacency. The Royal Docks were a space of constant movement, leaning hulls, form following function and a procession of metal-clad monoliths making their way to and from the Thames.
- 3.0.4 These spatial memories coincide with notions of the Airport itself. Airports are comprised of functionally specific volumes, segregated from each other for security or commercial reasons, replete with defined processes and controlled flows. The simple volumes and refined materials of CADP1 seek to express the Airport's discrete functional purposes: autonomous forms stacked or gathered against each other, as though containers, warehouses or ships themselves.
- 3.0.5 Indeed these large autonomous forms could be considered as the echo of a previous era's metal-clad monoliths returning to the docks: over-sailing, shading, veiling and revealing movement within. The simple platonic forms of the Dock's history set an aesthetic benchmark that can be refined and used to delight passengers.

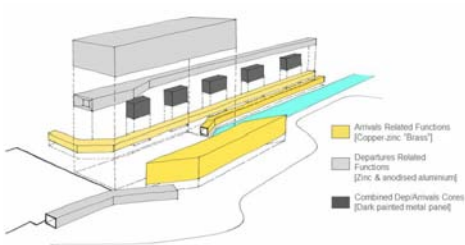


FIGURE 3.3: METAL COLOUR FAMILIES

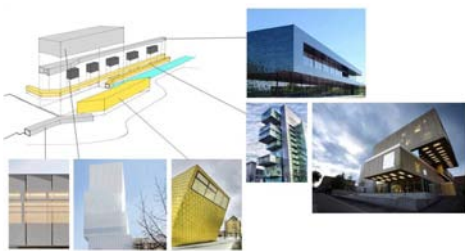


FIGURE 3.4: SIMPLE VOLUMES WITH REFINED MATERIALS



FIGURE 3.6: TAXI AND CAR RENTAL SERVICES BUILDING

3.0.6 The compositional strategy of expressly segregated volumes separated by functional purpose is also reinforced in the allocation of external treatments as a series of metallic material families. These allow the individual volumes to speak of the reality of their internal functional and processing divisions whilst forming a compositional palette that can be exploited to create drama or express the rare and grand scale of their setting (see FIGURE 3.2).

The simplest and most comprehensible of these divisions is that which relates most closely to the passenger's experience of arrivals versus departures (see FIGURE 3.3). This is reflected in two colour families:

- **Silver metals = Departures-related functions**
(such as, but not exclusively: natural anodised aluminium, natural zinc, stainless steel);
- **Gold-coloured metals = Arrivals-related functions**
(such as, but not exclusively: gold-colour anodised aluminium, actual copper-aluminium alloy).

3.0.7 Each functional volume is treated in a manner that is particular to its performance, the visual experience both outside and inside, its scale and orientation, and with a conscious regard to the relationship between each volume as part of a visual ensemble (see FIGURE 3.4).

3.0.8 These principles apply to all buildings and extensions to buildings, including minor structures. Such minor structures are exemplified by the Taxi and Car Rental Services Building (refer to figure 3.5).

4.0 FORMAL AND COMPOSITIONAL PRINCIPLES FOR BUILDINGS

The following Design Code requirements regarding formal and compositional principles for buildings are intended to create a visual language which is consistent with the aesthetic narrative and quality of CADP1.

4.1 Facades

The design of any new, extended or altered facade shall:

1. Be simple and uncluttered wherever feasible, utilising repeating geometries in standardised or randomised compositions.

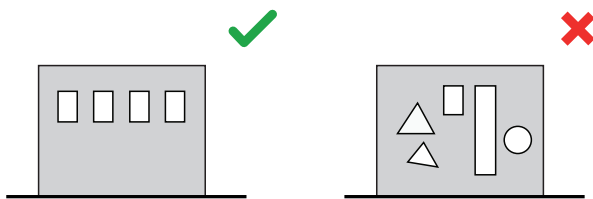


FIGURE 4.1: SIMPLE FACADES

2. Be straight, but not necessarily vertical, excluding all curving building geometries other than where specifically required for the constructional or operational function of the building or element within the building;

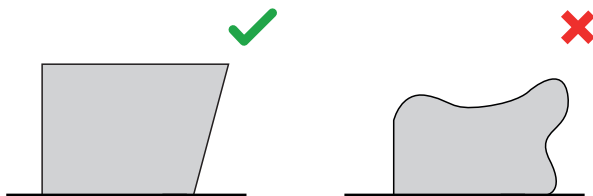


FIGURE 4.2: LINEAR FACADES

3. Conceal the building frame including primary frame, stability bracing and secondary framing ie. the structure should not be expressed on the outside of the building with the exception of where the functionality of that building dictates it;



FIGURE 4.3: CONCEALED STRUCTURE

4. Incorporate glazing in such a way as reinforce the monolithic, volumetric nature of the building;

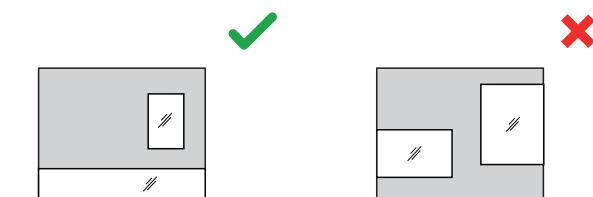


FIGURE 4.4: GLAZING

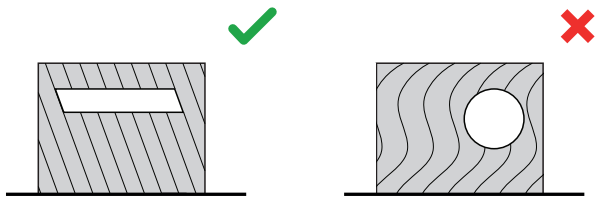


FIGURE 4.5: LINEAR APPEARANCE

5. Incorporate cladding, glazing and fixing systems that are linear or rectilinear in nature rather than curved;

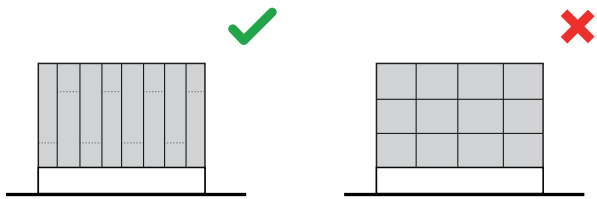


FIGURE 4.6: LINEAR CLADDING

6. Employ cladding and finishing systems that convey a linear aesthetic rather than a grid aesthetic eg. expressed vertical joints without expressed horizontal joints or vice-versa, or expressed joints in one direction with staggered joints in the other such that one direction remains dominant;

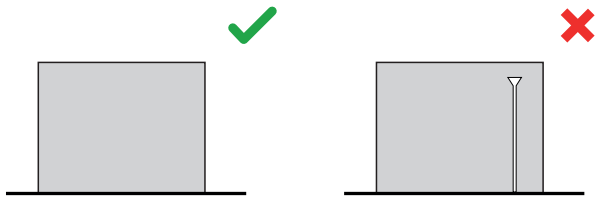


FIGURE 4.7: HIDDEN DRAINAGE

7. Avoid exposed drainage on facades unless the constructional or operational function of the building or element within the building result in the requirement for an exposed drainage solution;

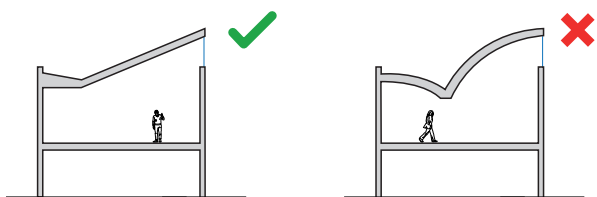


FIGURE 4.8: LINEAR ROOF DESIGN

4.2 Roofs

The design of any new roof shall:

8. Employ linear or rectilinear roof forms rather than curving forms.

5.0 MATERIAL AND COLOUR PRINCIPLES FOR BUILDINGS

The following Design Code requirements regarding material and colour principles for buildings are intended to create a visual language which is consistent with the aesthetic narrative of CADP1.

5.1 Facades

The materials and colours of any new facade shall:

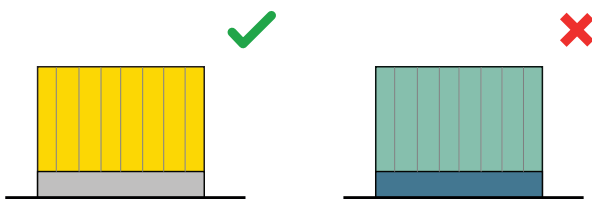


FIGURE 5.1: FACADE COLOUR PALETTE

1. Employ a restricted palette of black-grey, grey, silver or gold materials where externally visible and where not constrained by operational or constructional requirements;

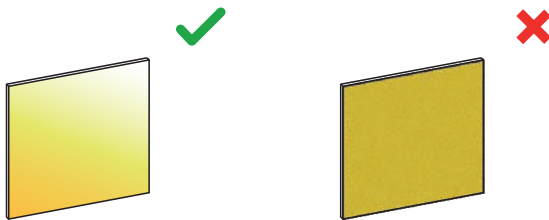


FIGURE 5.2: METALLIC CLADDING

2. Employ finishing materials or systems that have a metallic quality (eg. metallic PVDF finishes, anodised finishes or natural metal alloys such as copper-aluminium) rather than non-metallic finishes where there are no adverse performance constraints that result in other finishes being optimal;

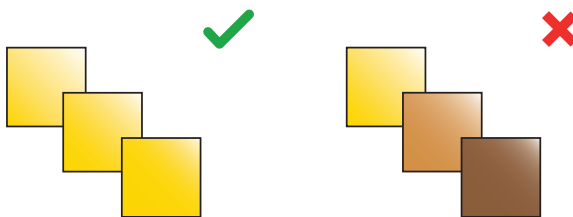


FIGURE 5.3: CLADDING PATINA

3. Employ finishing materials that retain their original colouring (eg. permanent metallic finishes, permanent pre-patinated finishes or natural metal alloys such as copper-aluminium) rather than those that may transform or change hue significantly with age and exposure to the elements (eg. brass or copper products without pre-patination);

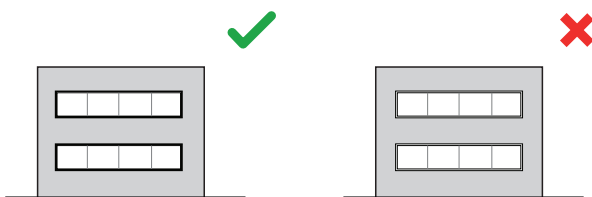
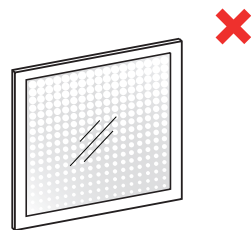
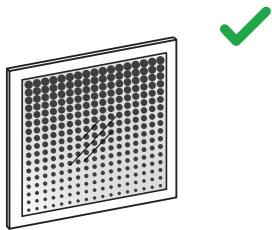


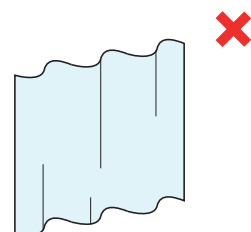
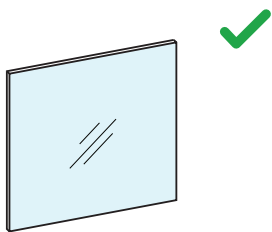
FIGURE 5.4: GLAZING FRAME COLOURS

4. Employ black or black-grey glazing framing, silicon jointing, back-spray cover details for those framing elements that are visible from the outside of the building. The interior frame may be white, black or black-grey;



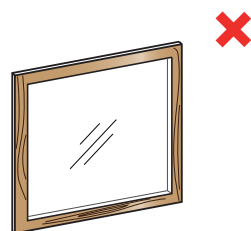
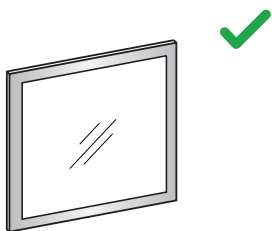
5. Employ white, silver, black, or black-grey finishes where obscuring, fritting, reflecting or manifestation treatments are required and visible from outside the building;

FIGURE 5.5: GLAZING FRITTING



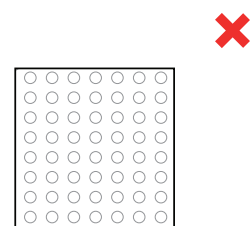
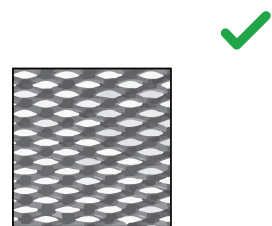
6. Employ flat glass, poly-carbonate or acrylic products where areas of transparency are required and where visible from outside the building rather than corrugated or profiled products, unless the constructional or operational function of the building or element within the building result in the requirement for another finish;

FIGURE 5.6: GLAZING TRANSPARENCY



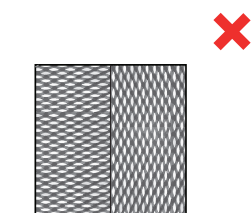
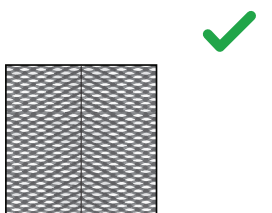
7. Employ glazing with aluminium framing rather than PVC, timber or other framing types unless the constructional or operational function of the building or element within the building result in the requirement for another system type;

FIGURE 5.7: FRAME MATERIALITY



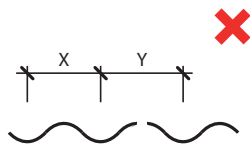
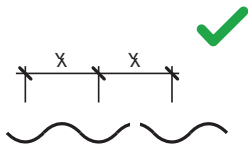
8. Employ expanded metal solutions where mesh is required, rather than perforated, woven or any other type of decorative metal mesh system unless the constructional or operational function of the building or element within the building result in the requirement for another system type;

FIGURE 5.8: MESH CLADDING



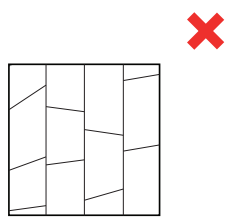
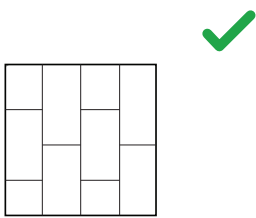
9. Maintain a single direction of mounting for any expanded metal system with openings facing down or up but never with multiple orientations in any single building volume or facade;

FIGURE 5.9: CONSISTENT SET OUT



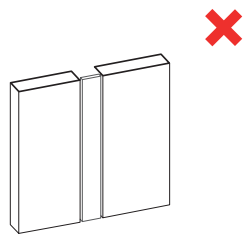
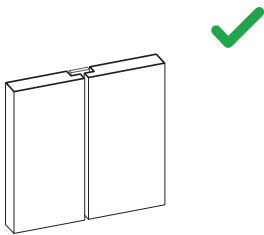
10. Maintain the consistency of the visual diagonals for any expanded metal system ie. with a regular spacing of expanded openings across panels in any single facade, wherein the excess metal between panels is removed to maintain any necessary expansion joint spacing;

FIGURE 5.10: CONSISTENCY OF MESH SYSTEMS



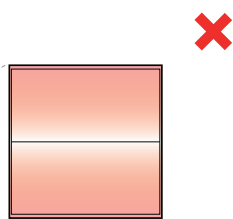
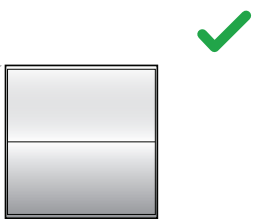
11. Avoid complicated patterning to external finishes unless the pattern is linear and intrinsic to the material eg. expanded metal systems.

FIGURE 5.11: PATTERNING



12. Minimise the visual impact of expressed structural movement joints by using a recessed or over-sailing cover detail wherever feasible;

FIGURE 5.12: STRUCTURAL MOVEMENT JOINTS



5.2 Roofs

The design of any new roof shall:

13. Where feasible, employ roof finishing materials that generally match the colour of the facades of the building or building volume to which the roof belongs, be they standing seam metal or exposed membrane solutions ie. grey or silver with silver facades, black-grey with black-grey facades, gold with gold facades. The exception would be where inverted roofing with concrete pavers is employed.

FIGURE 5.13: ROOF SHAPE