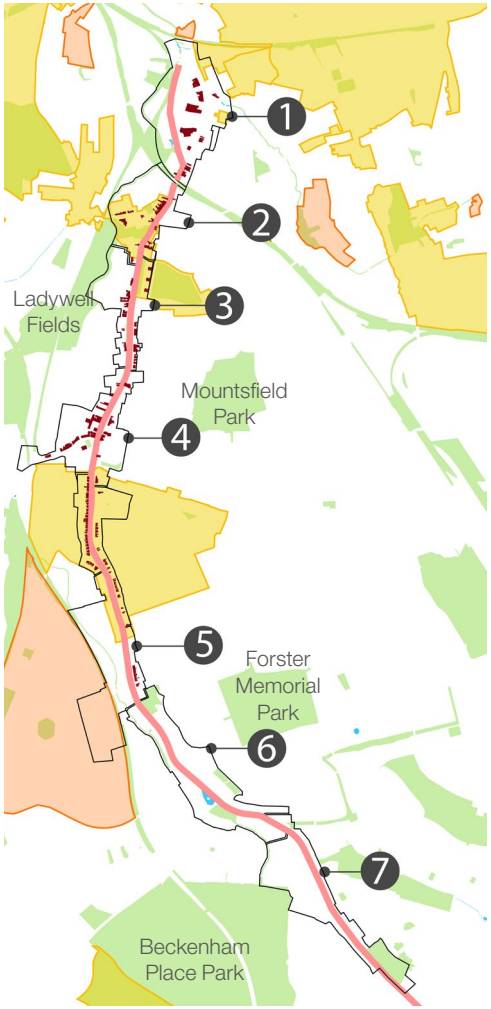
Overarching Guidance
Architectural character

Architectural character strategy



2.47 **1. Lewisham Town Centre (South)**
Lewisham Town Centre (South) Character Area is eclectic in character with a mix of late Victorian, mid-century, post war and late 20th century architectural styles, with a focal point around listed Victorian Clock Tower. The A21 corridor is dominated by the shopping centre car park and office buildings. The area has a mixed architectural character and new development would not need to respond positively to a singular and strongly defined established architectural styles. Shopfront improvement grants could be a way of improving the visual appearance of the street at the ground floor level.

2.48 **2. Ladywell**
The Ladywell Character Area has a more coherent historic character in comparison to Lewisham area's eclectic appearance. In general there is a consistent building height that should be respected. The prevailing materiality of the area is brick and it is felt this should be considered in any new developments.

2.49 **3. University Hospital Lewisham, Park and Greens**
This area is dominated by the post-war residential towers that lie adjacent to Lewisham Park and the varied assortment of building styles within the University Hospital Lewisham campus.

2.50 **4. Rushey Green and Catford**
In this area, there are several large civic buildings as well as a number of listed buildings, locally listed buildings and buildings classified as being of townscape merit. Any new development needs to be respectful of the historic environment.

2.51 **5. Bellingham**
The eastern side of the Bellingham Character Area comprises predominantly of large retail units and light industrial units of low architectural merit. The western side of the Character Area includes an attractive Edwardian retail parade which should be responded positively to by new development.

2.52 **6. Southend**
The Southend Character Area is predominantly post-war in character and includes housing estates of architecture merit including 1-10 Bromely Road estate which is listed. New developments should acknowledge the simplistic post-war architectural style of the character area and avoid isolated architectural statements.

2.53 **7. Downham**
This area is predominantly inter-war and suburban in character. The wider area is dominated by London County Council cottage estates and continuous retail parades. It is modest in scale and architectural style and new developments should respond positively to this character.

Heritage

2.54 Parts of several conservation areas are located along the A21. Proposed development that lie within conservation areas and their setting should preserve and enhance the special character of the conservation areas.

2.55 Within the Character Area Frameworks section of the document, buildings of townscape merit are identified which are non-designated heritage assets. Buildings of townscape merit add to local distinctiveness and have at least one of the following characteristics:

- They are part of an architecturally distinctive groups of buildings
- They are buildings that provide key focal points within the area
- They are buildings that are notable for their architectural detailing

Refer to Lewisham Characterisation Study (2019) for more detailed analysis of architectural character.

Parking

2.56 Development should be car free in areas of PTAL 4 – 6, Lewisham Town Centre, the New Cross, Lewisham and Catford Opportunity Area in accordance with policy T6.1 in the London Plan 2021.

Potential Bakerloo Line Extension

2.57 Part of the northern area of the study area around Molesworth Street includes safeguarded sub-surface interest (tunnels) for the future delivery of the BLE. The 'agent of change' principle will apply to sites within or adjacent to this safeguarded land.

Overarching Guidance
Air Quality:
Improve pedestrian infrastructure

Introduction

2.58 Parts of Lewisham High Street have very poor air quality due to the volume of motor vehicles on the street. Through achieving a modal shift for journeys along the A21 from motor vehicle use to sustainable transport air quality will improve.

Pedestrian and Cycle Infrastructure

2.59 Paths and cycleways that are visually attractive are more likely to be used.

Pedestrian infrastructure can be improved in the following ways:

2.60
- Green infrastructure – tree planting, living walls and other soft landscaping
- Separating pedestrians from vehicles
- Active frontages
- Appropriate lighting
- Quicker connections

2.61 See the Emerging Transport Strategy in the appendix for further detail on how walking and cycling facilities could be improved.

1. Existing green infrastructure along A21

3. Appropriate lighting example

2. Active frontages along A21

2.61

Overarching Guidance
Air Quality:
Improve cycling infrastructure

Good practice examples to improve cycling infrastructure:

2.62
- Provide a **continuous connection** between places that people want to travel between
- Build **protected cycle lanes**, with as much separation as possible from busy roads and, where possible, from pedestrians
- Design **segregated crossings** at busy junctions
- Create and sign **cut-throughs** to create networks of quiet routes that connect up residential areas, schools, libraries, shops and other amenities
- **Parking at stations** - provide high quality and secure cycle parking, under-cover rentable bike storage facilities and short-term bike hire services at stations
- **Speed Tables** - raising the crossing slows down vehicles
- Create a **hierarchy and separation** between different traffic flows: pedestrian - cyclist - public transport - car
- **De-clutter streets** from physical obstacles that require cyclists to dismount on cycle routes

Source: Wired

Please see the Emerging Transport Strategy in the Appendix.

1. Raising the crossing slows down vehicle speeds

2. Cycle storage at Edmonton Green station, Enfield

Overarching Guidance

Air Quality:
Consider street geometry

Street geometry guidance

2.63 This guidance sets building geometry considerations for the development sites along A21 to target high levels of air pollution along the road. Other design factors will also need to be taken in to account when designing the form of buildings along the A21.

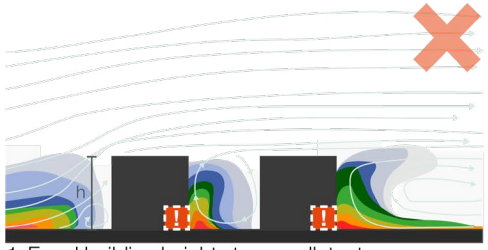
Vary building heights

2.64 New developments along A21 should respond to prevailing building heights but also consider increased heights to distribute air pollution. Refer to building heights strategy on page 22.

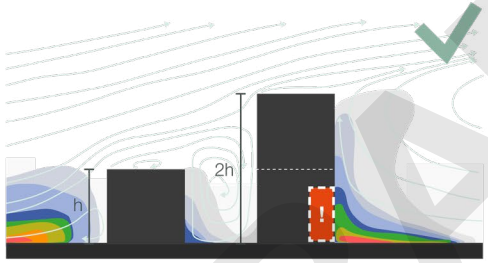
Narrow the building widths

2.65 Consider proportionally narrower buildings to A21 where context allows. Wider / big box buildings should be considered further back within larger development sites.

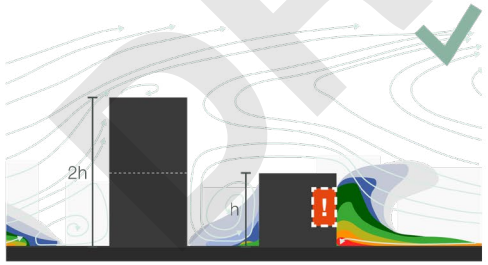
Vary building heights



1. Equal building heights traps pollutants



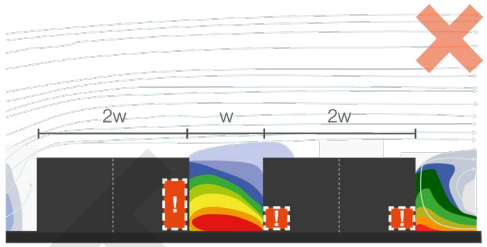
2. Variable building heights helps to distribute pollutants



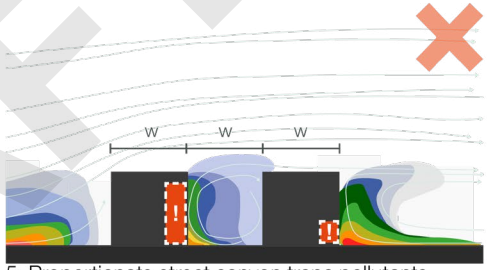
3. Variable building heights helps to distribute pollutants

Source: On the Effects of Lateral Openings on Courtyard Ventilation and Pollution, T. Gronemeier, M. Sühring

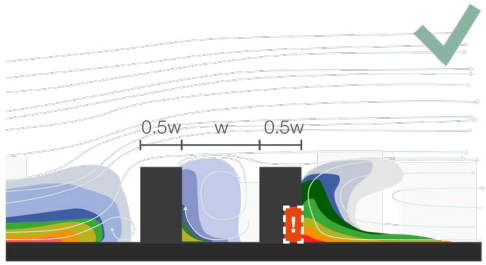
Narrow the buildings width



4. Wide buildings with narrow roads traps high levels of pollutants

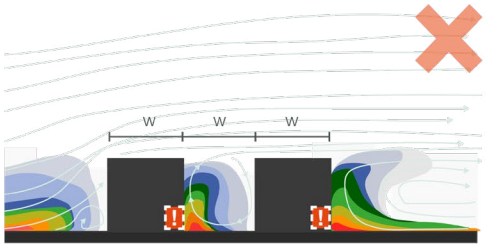


5. Proportionate street canyon traps pollutants

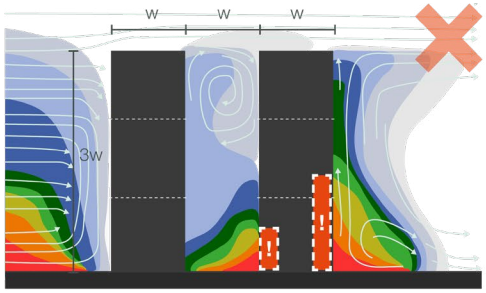


6. Narrow buildings in wider road context create better environment to distribute pollutants

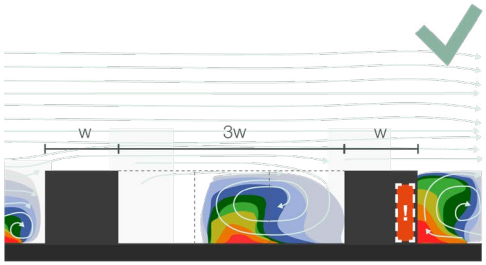
Widen the street



7. Proportionate street canyon traps pollutants



8. Narrow street canyon in tall building context traps high levels of air pollutants



9. Wide street canyon helps to distribute air pollutants

Overarching Guidance

Air Quality:
Consider roof shape

Roof shape guidance

2.66 This guidance sets roof geometry considerations for the development sites along A21 to target high levels of air pollution along the road. This is for guidance purposes only and other considerations should be factored into the design.

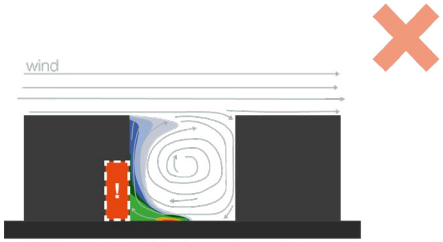
Flat

2.67 Developments along A21 should consider adjacent context and where possible consider introducing slanted or trapezoid roofs to the buildings in order to decrease air pollution along A21.

Downwind / upwind wedged

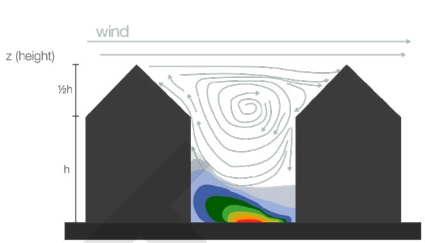
2.68 Slanted and Trapezoid roof shape tends to distribute air pollutants better than downwind or upwind wedged shape roofs. Trapezoidal roof shapes may be preferable to slanted roofs as they are more likely than slanted roofs to be able to accommodate living roofs.

Flat

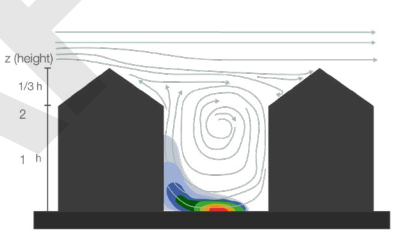


1. Flat roofs tend to trap air pollutants

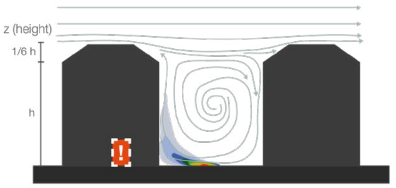
Slanted



2. Increased slanted roof height helps to distribute air pollutants

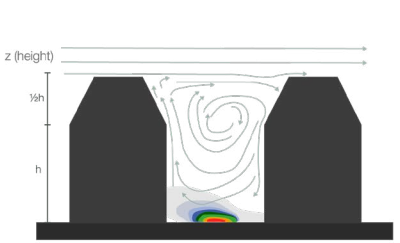


3. Slanted roofs with lower slope brings more wind to the ground level

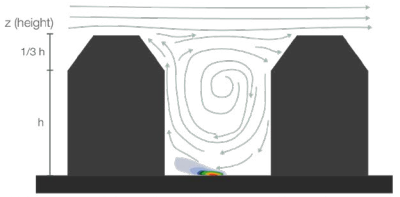


4. Low slope slanted roofs traps air pollutants

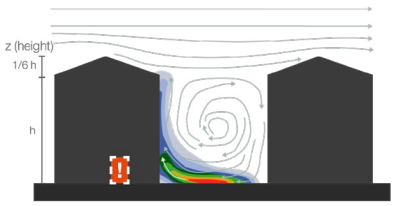
Trapezoid



5. Steep slope trapezoid roof shape helps to distribute air pollutants



6. Trapezoid roofs with lower slope brings more wind to the ground level



7. Low slope trapezoid roofs traps air pollutants

Source: Impact of height and shape of building roof on air quality in urban street canyons, Mohamed F. Yassin

Overarching Guidance

Air Quality:
Enable wind to ventilate the site

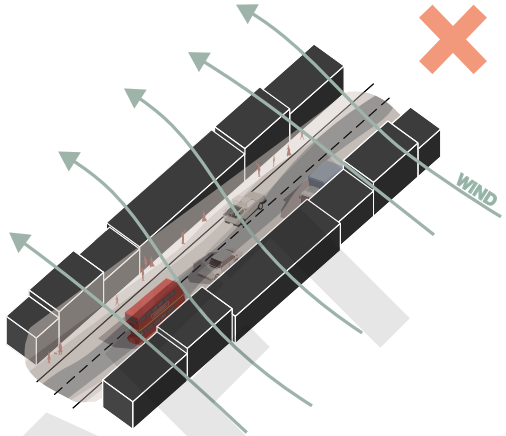
Street ventilation guidance

2.69 This guidance sets building development considerations for the development sites along the A21 to target high levels of air pollution along the road.

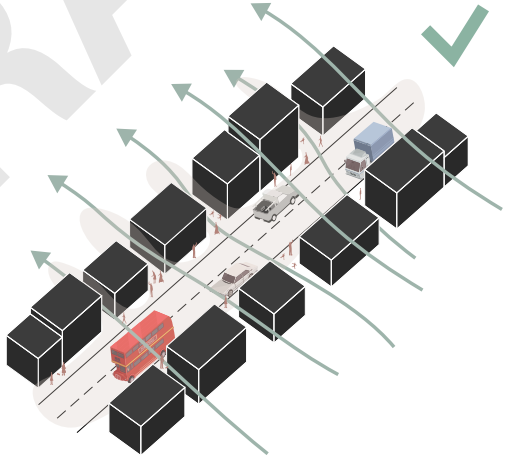
Good practice examples to improve street ventilation:

2.70
- **Frequent intersections** or open areas mid-block will allow winds to penetrate public realm at pedestrian level, ventilate your site and the street to which it's adjacent.
- **Wider streets** are more effective in dispersing air pollutants.
- **Street canyons oriented parallel** to wind direction tend to channel winds and disperse pollutants well.
- **Varying building heights** will increase the urban roughness and therefore improve streets ventilation.
- **Irregular street profile** with setting and stepping the buildings back from the street can decrease channelled winds and improve pedestrian comfort.

Wind perpendicular to the street

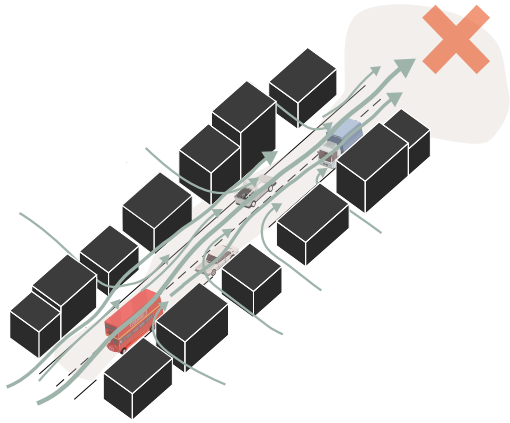


1. Pollution concentration within street canyon

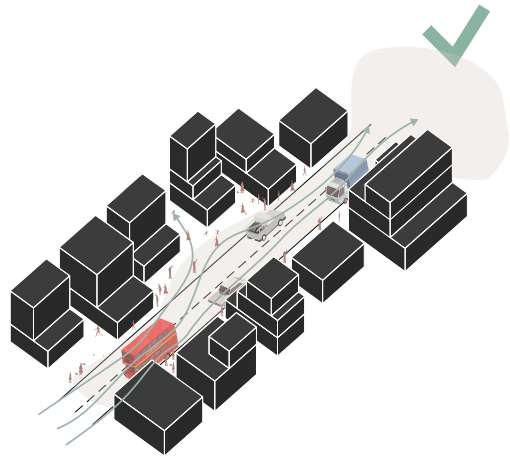


2. Lateral openings within street canyons enable better street ventilation

Wind parallel to the street



3. Streets parallel to prevailing wind direction have a potential to channel fast and uncomfortable to pedestrian winds



4. Streets parallel to prevailing wind direction have a potential to channel fast and uncomfortable to pedestrian winds

Overarching Guidance

Air Quality:
Locate sensitive uses away from emissions

Away from the pollution source

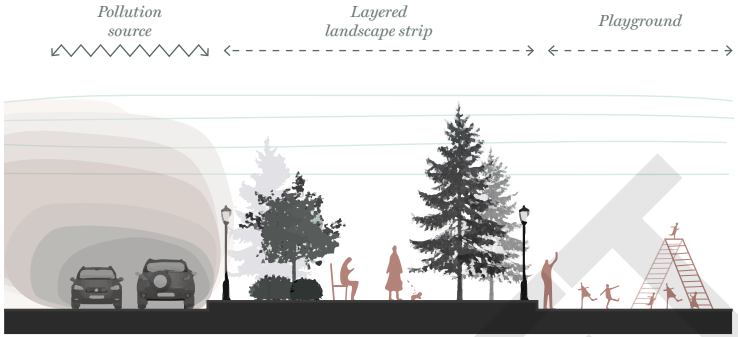
2.71 Both vertical and horizontal distances can provide good separation from the pollution source. In flat and open terrain, under calm conditions, air pollution levels are highest adjacent to the road and decrease with distance from it.

Upwind from the pollution source

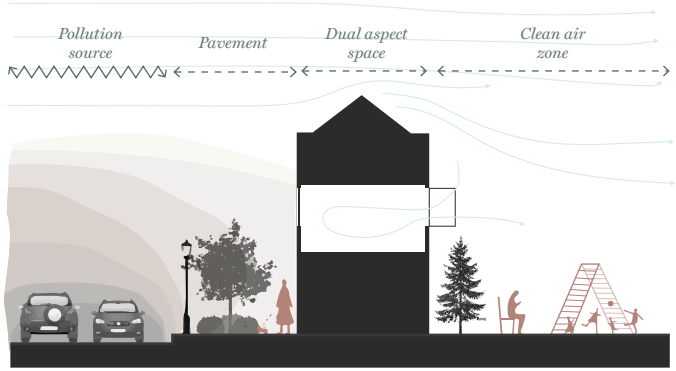
2.72 The location of new uses that may generate high emissions should be carefully considered to both protect existing pollution-sensitive uses and to allow good dispersion of pollutants. New bus stations, taxi stands, loading zones, parking garages etc. should be located in well ventilated spaces downwind from spaces used by most sensitive users such as children or elderly.

Discourage the use of highly polluted areas

2.73 Do not place benches or play equipment directly adjacent to A21; a dense shrub or tree separation between play and rest areas should be introduced.



1. Locate sensitive uses away from major streets and upwind from the pollution source



2. Dual aspect flats/classrooms allow for fixing windows from the side of higher pollution

3. Walls and hedges are very effective in protecting sensitive zones from pollution

Overarching Guidance
Air Quality:
Green infrastructure

Efficient use of vegetation

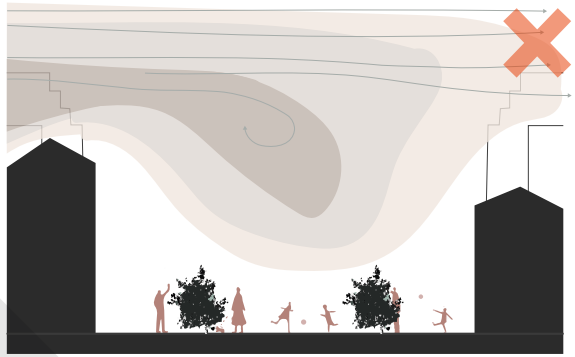
2.74 Vegetation can help reduce air pollution either by direct filtration, or by physically separating the sensitive uses from air pollution sources limiting the exposure of the most sensitive population. Different types of vegetation, species, ecotypes and varieties all have different attributes and different pollutant removal capacity.

2.75 If strategically designed, green infrastructure can mitigate poor air quality on a local-scale, however it's good to note that it can never remove all the pollutants from air, and becomes less and less efficient as the distance from the pollutant source increases.

Good practice examples of street vegetation:

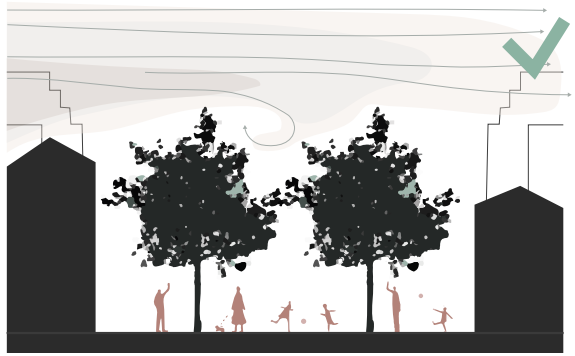
2.76
- Dense branching and twig structure
- Rough bark
- Large and/or hairy leaves
- Large trees remove more air pollutants than small trees
- Choose narrow crown trees or low level planting for narrow polluted roads to avoid enclosing the street and trapping street-level pollution

1. Avoid wide tree canopies which tends to trap street-level pollutants on narrow roads



3. Low level planting is ineffective when trying to shield from polluted air above

2. Low level planting protects pedestrian walkways street-level road pollution



4. Wide tree crowns protects from the import of polluted air above