Local Plan Monitoring Report – Roof Terraces and Green Roofs

City of London

Local Plan Policy CS19: Open Spaces and Recreation

Data as at 31st March 2020



Published by the City of London, Department of the Built Environment

May 2021



Contents

Tables of Figures	3
Executive Summary	5
1. Introduction	7
Defining Roof Terraces, Green Roofs and Green Walls in the City of I	London7
Policy Context	7
Report Structure	8
2. Roof Terrace and Green Roof Completions	10
Introduction	10
Past Completions (2011/12 to 2019/20)	10
Sites with Roof Terraces Only	13
Sites with Roof Terraces and Green Roofs	13
Sites with Green Roofs Only	14
Projected Completions (2020/21 to 2025/26)	15
Sites with Roof Terraces Only	15
Sites with Roof Terraces and Green Roofs	16
Sites with Green Roofs Only	16
3. Green Roof Types	19
Introduction	19
Past	19
Completions (2011/12 to 2019/20)	19
Projected Completions (2020/21 to 2025/26)	21
4. Public Access	25
Introduction	25



Past Completions (2011/12 to 2019/20)	.25
Projected Completions (2020/21 to 2025/26)	.28
5. Green Walls	.31
Introduction	.31
Past Completions (2011/12 to 2019/20)	.31
Green Wall Types	.34
Projected Completions (2020/21 to 2025/26)	.34
Green Wall Types	.34
6. Sustainability and Flood Risk	.36
Appendices	.37
Appendix 1: Statistics	.37
Appendix 2: Projected Sites	.40
Information	.48
Tables of Figures	
Map 2-1: Roof Spaces in the City of London (up to 2019/20)	.11
Map 3-1: Projected Green Roof Types in the City of London (2020/21 to 2025/26)	.23
Map 4-1: Public Access to Projected Roof Spaces in the City of London (2020/21 to 2025/26)	.29
Map 5-1: Green Walls in the City of London (up to 2019/20)	.33
Map 5-2: Projected Green Wall Types in the City of London (2020/21 to 2025/26)	.35
Graph 2-1: Number of Sites analysed by Roof Space Types in the City of London (2011/12 to 2019/20)	10



City of London Monitoring Report: Roof Terraces and Green Roofs

Graph 2-2: Projected Number of Roof Spaces in the City of London (2020/21 to 2025/26)	15
Graph 3-1: Number of Green Roof Completions in the City of London (2011/12 to 2019/20) analysed by Type	20
Graph 3-2: Area of Green Roof Completions in the City of London (2011/12 to 2019/20) analysed by Type	20
Graph 3-3: Projected Number of Green Roof Completions in the City of London (2020/21 to 2025/26) analysed by Type	22
Graph 3-4: Projected Green Roof Area in the City of London (2020/21 to 2025/26) analysed by Type	22
Graph 4-1: Access to Roof Spaces in the City of London (2011/12 – 2019/20)	25
Graph 4-2: Public Access to Projected Roof Spaces in the City of London (2020/21 t 2025/26)	
Picture 3-1: Bartholomew Close (Extensive Green Roof)	21
Picture 3-2: Barbican Estate (Intensive Green Roof)	21
Picture 4-1: 120 Fenchurch Street (Site with Full Public Access)	26
Picture 4-2: Mint Hotel, 7 Pepys Street (Site with Limited Public Access)	26
Picture 4-3: 33 King William Street (Site with Access for Occupants and Tenants)	27
Picture 4-4: Exchange House, 12 Primrose Street (Site with No Access)	27
Picture 5-1: Mermaid Arts and Conference Centre, Puddle Dock	32
Picture 5-2: 2 Sky Garden Walk	32



Executive Summary

There is a range of buildings in the City of London that provide **roof terraces and green roofs**.

Roof terraces in many instances are integrated with green roof provision. However, in some instances the roof space may be either just a roof terrace or a green roof. Analysing the profile shows that:

- Sites with roof terraces only increased from 14 in 2011/12 to 21 in 2019/20, and are projected to increase to 35 in 2025/26;
- Sites with roof terraces and green roofs increased from 24 in 2011/12 to 55 in 2019/20, and are projected to increase to 74 in 2025/26, and
- Sites with green roofs only increased significantly from 18 in 2011/12 to 50 in 2019/20, and are projected to increase to 58 in 2025/26.

The City of London contains a mixture of extensive and intensive green roofs. Between the 2011/12 and 2019/20 periods:

- There was a significant increase in extensive green roofs only, from 23 to 64, with an increase in the green roof area, from 8,200m² to 25,900m²;
- There was a smaller increase in sites with intensive green roofs only, from 16 to 26, with an increase in the green roof area from 13,900m² to 18,500m².
- Some sites comprised a mixture of extensive and intensive green coverage; the number of sites increased from 4 to 16, with an increase in green roof area from 4,000m² to 12,400m².

Projected green roof completions between the 2020/21 and 2025/26 periods will be primarily extensive. Thus, as at 31st March 2026, green roof spaces in the City of London are projected to comprise of:

- 82 sites with extensive green roofs only, with an aggregate roof area of 33,500m²;
- 33 sites with intensive green roofs only, with an aggregate green roof area of 21,400m², and
- 18 sites with a mixture of extensive and intensive green roofs, with an aggregate green roof area of 15,200m².

Between 2011/12 and 2019/20:

• The number of roof spaces with full public access increased from four to six;



- The number of roof spaces with partial or limited public access increased from six to nine, and
- The number of roof spaces provided for the enjoyment of building occupants and tenants increased most significantly, from 28 to 61.

Sites with green roofs only provided no access, except for maintenance.

As at 2025/26, access to roof spaces in the City of London is projected to comprise of:

- 7 sites with full public access;
- 15 sites with partial or limited public access;
- 87 with access for building occupants, and
- 58 with green roofs only, and thus no access.

As at 31st March 2020, roof terraces in the City of London primarily allowed for inclusive access; this trend is projected to continue between the 2020/21 and 2025/26.

Between 2011/12 and 2019/20 the number of sites in the City of London with green walls increased from four to ten. Six green walls are projected for completion between 2020/21 and 2025/26.

Green walls in the City of London were primarily intensive; this trend is projected to continue between the 2020/21 and 2025/26 periods.

New green roofs provided both visual amenities and a range of environmental benefits, including biodiversity, run-off attenuation and building insulation.

Projected green roofs and green walls in the City of London will contribute to biodiversity, by providing robust and native plant species, photovoltaic panels, allowing for rainwater attenuation, and helping to mitigate flood risk.



1. Introduction

Defining Roof Terraces, Green Roofs and Green Walls in the City of London

The City of London is a world-leading financial and professional services centre and is thus one of the most densely built-up parts of London. The City of London contains a range of roof terraces, green roofs and green walls. The provision of **roof terraces**, **green roofs and green walls** has addressed requirements for public space and urban greening in a dense urban environment.

The City of London **Audit Report – Roof Terraces and Green Roofs** sets out definitions of roof terraces, green roofs and green walls used in this report, and their historical context. The report is available from the <u>Planning Policy Library</u>.

Policy Context

The National Planning Policy Framework (NPPF), London Plan and City of London Local Plan set out the policy context relating to roof terraces, green roofs and green walls.

Paragraph 20 of the NPPF (published February 2019) indicates:

'Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for ... conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation.'

The London Plan (published March 2016) includes:

- Policy 5.10 (Urban Greening) which encourages green roofs and walls, and
- Policy 5.11 (Green Roofs and Development Site Environs) which sets sustainability objectives for green roofs.

Paragraph 5.25 states that:

'Design features such as green roofs ... can enhance biodiversity, absorb rainfall, improve the performance of the building, reduce the urban heat island effect and improve the appearance of a development.'



The <u>London Plan 2021</u> (published March 2021) has replaced the 2016 **London Plan**, but the 2016 Plan remains the relevant plan for consideration in relation to the monitoring period to March 2020. The **London Plan 2021** continues to support urban greening through **Policy G5 (Urban greening)** which encourages 'green roofs, green walls and nature-based sustainable drainage' in major development proposals.

The City of London Local Plan (adopted January 2015) **Core Strategic Policy CS10 (Design)** encourages development with 'an appropriate street level presence and roofscape and a positive relationship to neighbouring buildings and spaces'.

Paragraph 3.10.18 states that:

'Green roofs and green walls have the potential to contribute to climate change adaptation by reducing surface water run-off and by improving building insulation, urban greening and biodiversity. Additionally, green roofs and walls can be used in context with amenity spaces and can enhance their quality and the appearance of the City's roofscape. The City Corporation especially encourages the installation of biodiverse green roofs. Their substrates should be between 80mm and 150mm thick to provide water attenuation. They are easy to install and require little maintenance. Varying the substrate levels within this range will be encouraged to enhance biodiversity, and a high proportion of native plants are expected to be used.'

Policy DM 10.2 (Design of green roofs and walls) and Policy DM 10.3 (Roof gardens and terraces) also sets requirements for roof terraces, green roofs and green walls.

Policy CS19 (Open Spaces and Recreation) encourages developers to ensure that new green roofs are accessible to the public.

The <u>Proposed Submission Draft City Plan 2036</u> (published March 2021) complements these policies in **Strategic Policy S14 (Open Spaces and Green Infrastructure)**: 'Creating, maintaining and encouraging high quality green infrastructure'.

Report Structure

This report is structured as set out below:

- Section 2 analyses the completion of roof terraces and green roofs;
- **Section 3** analyses green roof types;
- **Section 4** analyses public access to roof terraces and green roofs;
- Section 5 analyses green walls, and



• **Section 6** analyses how green roofs and green walls contribute to biodiversity requirements.

The **appendices** set out:

- Detailed statistics (Appendix 1) and
- Projected sites with roof terraces, green roofs and green walls (**Appendix 2**), including:
 - o Location;
 - o Planning permission;
 - o Projected financial year of completion;
 - o Description (e.g. roof space or green wall type);
 - o Projected green area (for sites with green roofs and green walls); and
 - Public access, as set out in the planning permission details (applicable only to roof space).

The City of London Audit Report: Roof Terraces and Green Roofs provides a full listing of the existing sites.



2. Roof Terrace and Green Roof Completions

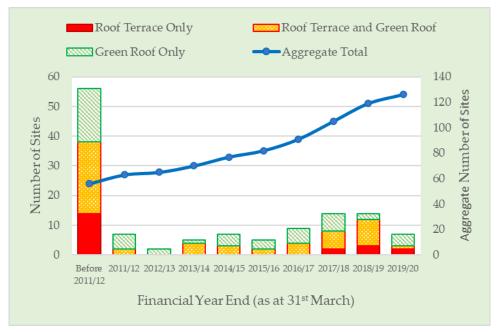
Introduction

This section analyses roof terraces and green roofs by year of completion between 2011/12 and 2019/20, and projections up to 2025/26.

Past Completions (2011/12 to 2019/20)

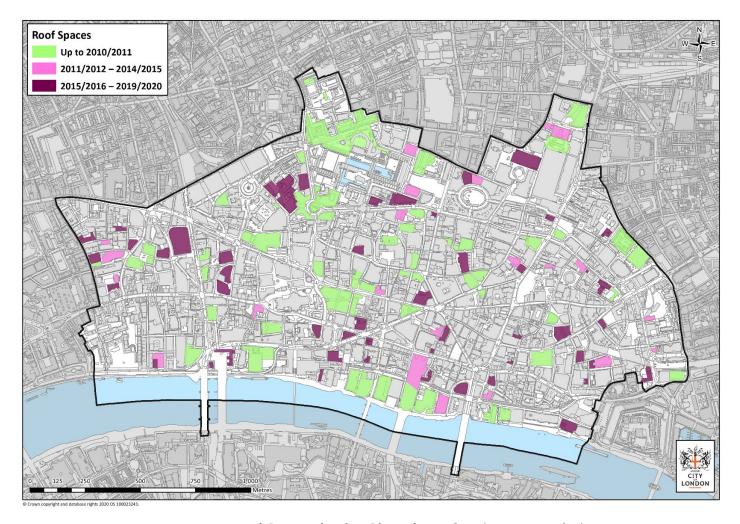
This section analyses the roof space completions in the City of London between 2011/12 and 2019/20 by type:

- **Graph 2-1** illustrates the statistics;
- Map 2-1 shows the spatial distribution, and
- Appendix 1 (Table A-1-1) sets detailed statistics.



Graph 2-1: Number of Sites analysed by Roof Space Types in the City of London (2011/12 to 2019/20)





Map 2-1: Roof Spaces in the City of London (up to 2019/20)





Between the 2011/12 and 2019/20, the number of roof spaces in the City of London increased from 56 to 126.

Sites with Roof Terraces Only

The first sites with **roof terraces only** in the City of London were completed in the late 1950s. A range of schemes were then constructed during the 1970s, 1980s and 1990s. As at 31st March 2011, there 14 sites with roof terraces only in the City of London. These were located sporadically, except for four roof sites adjacent to the river, primarily taking advantage of the river views (one example is 3 Lower Thames Street).

Subsequent to this:

- No sites with roof terraces only were completed between the 2011/12 and 2016/17 periods, and
- Seven sites with roof terraces only were completed between the 2017/18 and 2019/20 periods; these were primarily located towards the eastern area.

Thus, as at 31st March 2020, there were 21 sites with roof terraces only in the City of London.

Sites with Roof Terraces and Green Roofs

As at 31st May 2011, there were 24 sites with **roof terraces and green roofs** in the City of London. As **Map 2-1** shows, these sites were located sporadically, but formed clusters at Blackfriars, the Barbican Estate, Cheapside, Upper Thames Street and Middlesex Street.

Between the 2011/12 and 2014/15 periods, a low number of sites with roof terraces and green roofs were completed, in clusters near London Wall and Fenchurch Street Station. The highest total was four, completed during 2013/14.

Between the 2015/16 and 2019/20 periods, the number of sites with roof terraces and green roofs significantly increased, through the completion of 16 new sites, which formed clusters at:

Farringdon Street, including 1 New Street Square, 70 Farringdon Street and 1
 & 2 New Ludgate;



- London Wall, including River Plate House, 8 Finsbury Circus, and 1 Angel Court;
- Cannon Street, including 4 Cannon Street, 45 Cannon Street, Senator House,
 85 Queen Victoria Street, and Cannon Green Building, 27 Bush Lane, and
- King William Street, including 1 King William Street, 33 King William Street and The Monument Building, 11 Monument Street.

Thus, as at 31st March 2020, there were 55 sites with green roofs and roof terraces. Sites with Green Roofs Only

As at 31st March 2011, there were 18 sites with **green roofs only** in the City of London.

As **Map 2-1** shows, these were primarily in clusters:

- Towards the west of the City of London, at Fetter Lane and Farringdon Street, including 22 Chancery Lane, 25 Farringdon Street and 5 Fleet Place, and
- In the central area, near London Wall, Gresham Street and Cheapside, including 60 Gresham Street, 7-9 Copthall Avenue and King House, 2 Copthall Avenue.

Between 2011/12 and 2014/15, sites with completed with green roofs formed clusters at:

- Fetter Lane, including 20 Cursitor Street and 110 Fetter Lane;
- Cannon Street, including Cannon Street Station;
- Bishopsgate, including 5 St. Helen's Place, and
- Minories, including 24-26 Minories and 52-56 Minories.

Between 2015/16 and 2019/20, 15 sites with green roofs only were completed, forming clusters:

- In the western area, near Fetter Lane, including 40 Chancery Lane, 12 New Fetter Lane and Clifford's Inn, Fetter Lane, and
- In the eastern area, around Fenchurch Street, including 9-10 Philpot Lane, 1 Creechurch Place and MAPFRE Dixon House, 72-75 Fenchurch Street.

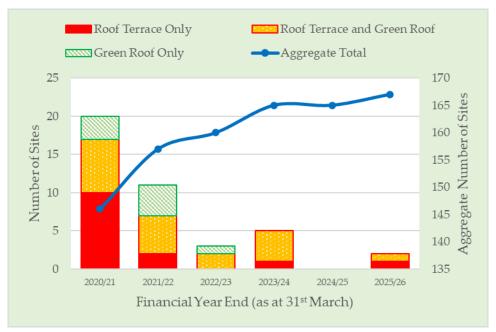
Thus, as at 31st March 2020, there were 50 sites with green roofs only.



Projected Completions (2020/21 to 2025/26)

This section analyses projected roof space types, between 2020/21 and 2025/26:

- Graph 2-2 illustrates statistics;
- Map 2-2 shows the spatial distribution;
- Appendix 1-1 (Table A-1-1) summaries the projections statistics, and
- Appendix 2-1 (Table A-2-1) lists individual sites.



Graph 2-2: Projected Number of Roof Spaces in the City of London (2020/21 to 2025/26)

41 roof space sites are projected for completion between the 2020/21 and 2025/26 periods. Thus, as at 31st March 2026, the City of London is projected to have 165 sites with roof terraces and green roofs.

Sites with Roof Terraces Only

14 sites with **roof terraces only** are projected for completion between the 2020/21 and 2025/26 periods, including clusters near Ludgate Hill, Moorgate and Fenchurch Street. Thus, as at 31st March 2026, there are projected to be 35 sites with roof terraces only in the City of London.



Sites with Roof Terraces and Green Roofs

19 sites with **roof terraces and green roofs** are projected for completion between the 2020/21 and 2025/26, located towards the east of the City, with concentrations at:

- Broadgate, including 1-2 Broadgate and 100 Liverpool Street, and
- Minories, including 80 Fenchurch Street and 35 Vine Street.

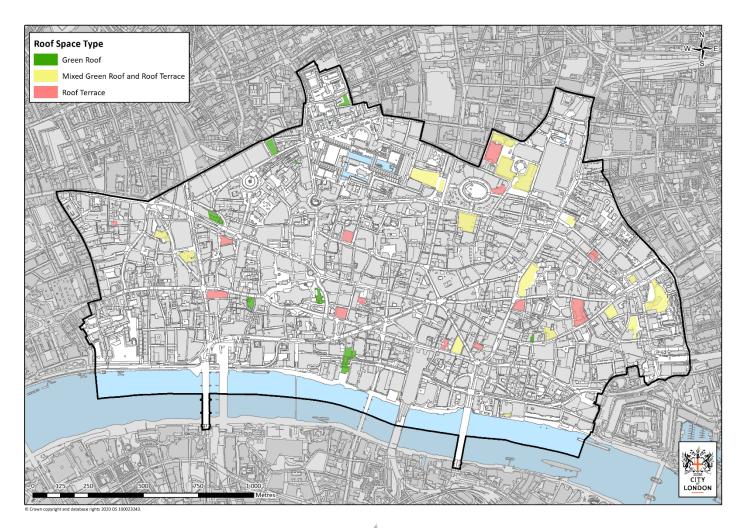
Thus, as at 31st March 2026, there are projected to be 74 sites with roof terraces and green roofs in the City of London.

Sites with Green Roofs Only

Eight sites with **green roofs only** are projected for completion between 2020/21 and 2025/26 and will be primarily located towards the west of the City.

Thus, as at 31st March 2026, there are projected to be 58 sites with green roofs only in the City of London.







Map 2-2: Projected Roof Space Types in the City of London (2020/21 to 2025/26)



3. Green Roof Types

Introduction

This section analyses green roof types, described as **extensive** and **intensive**. The **Roof Terraces and Green Roofs Audit Report** sets out the definitions used.

Past Completions (2011/12 to 2019/20)

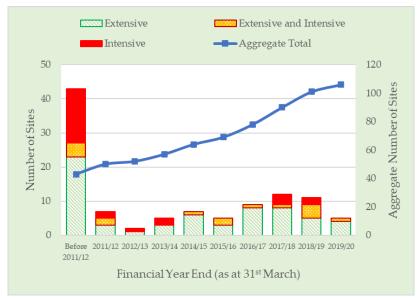
This section analyses existing green roofs by type, and year of completion:

- **Graph 3-1** illustrates the number of sites;
- Graph 3-2 illustrates the total green roof area, and
- Appendix 1 (Table A-1-2) sets out the statistics.

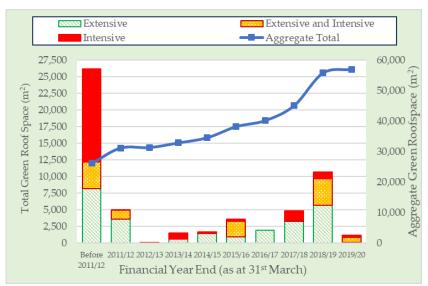
As at 31st March 2011, the City of London had a range of green roof spaces including:

- 23 sites with extensive green roofs only, with a cumulative green roof area of 8,200m²;
- 16 sites with intensive green roofs only, which generally covered larger areas than extensive green roofs, and provided a cumulative green roof area of 13,900m², and
- Just 4 sites with extensive and intensive green roofs, with a cumulative green roof area of 4,000m².





Graph 3-1: Number of Green Roof Completions in the City of London (2011/12 to 2019/20) analysed by Type



Graph 3-2: Area of Green Roof Completions in the City of London (2011/12 to 2019/20) analysed by Type

Between 2011/12 and 2019/20, the profile of green roof spaces increased significantly. At the 31st March 2020 there were:

- 64 sites with extensive green roofs only, with an aggregate green roof area of 25,900m²); examples included the redevelopment scheme at Bartholomew Close (Picture 3-1) and 34 London Wall;
- 26 sites with intensive green roofs, with an aggregate green roof area of 18,500m²; examples included the Barbican Estate highwalks (Picture 3-2) and 120 Fenchurch Street, and



• 16 sites with extensive and intensive green roofs, with an aggregate green roof area of 12,400m²; examples included 4 Cannon Street and Tower Suites by Blue Orchid, 100 Minories.



Picture 3-1: Bartholomew Close (Extensive Green Roof)



Picture 3 2: Barbican Estate (Intensive Green Roof)

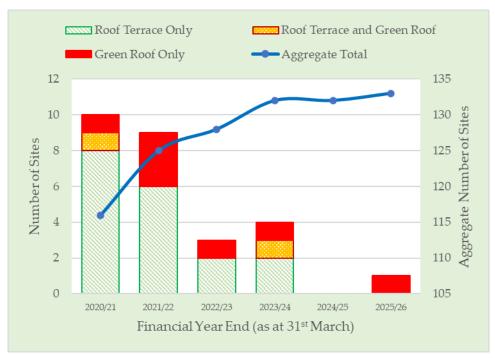
Projected Completions (2020/21 to 2025/26)

This section analyses projected green roofs, by type and year of completion:

- **Graph 3-3** illustrates the number of sites;
- **Graph 3-4** illustrates the total green roof area;
- Map 3-1 shows the spatial distribution;



- Appendix 1 (Table A-1-2) sets out the statistics, and
- Appendix 2-1 (Table A-2-1) lists individual sites.

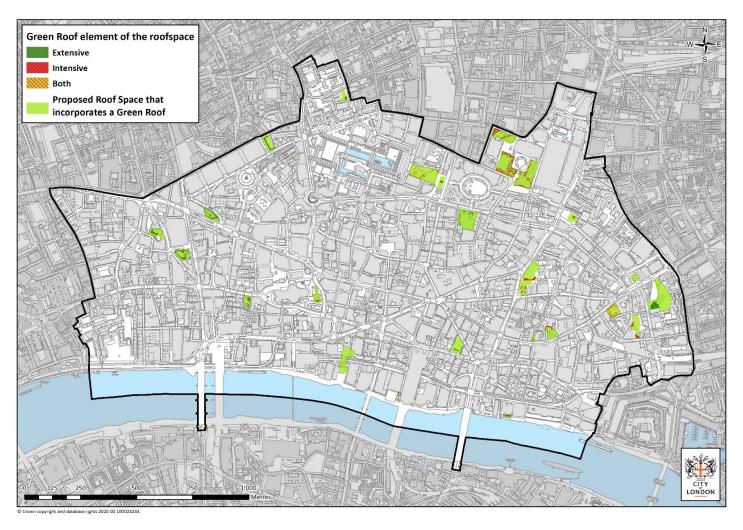


Graph 3-3: Projected Number of Green Roof Completions in the City of London (2020/21 to 2025/26) analysed by Type



Graph 3-4: Projected Green Roof Area in the City of London (2020/21 to 2025/26) analysed by Type





Map 3-1: Projected Green Roof Types in the City of London (2020/21 to 2025/26)



During the period 2020/21 to 2025/26 projected greens will be primarily **extensive**, including:

- 18 sites with extensive green roofs only, with a cumulative green roof area of 7,600m²; these will be in a sporadic pattern, but with clusters at:
 - St. Paul's, including the proposed Farringdon East Station, Lindsey Street, and St. Paul's Cathedral School;
 - Liverpool Street Station, including 101 Moorgate and 150 Bishopsgate, and
 - Aldgate, including St. Botolph-without-Aldgate Church, Aldgate, and 15-16 Minories;
- Seven sites with intensive green roofs only, with a cumulative green roof area of 2,900m² located towards the eastern part of the City of London, and
- Two sites with extensive and intensive green roofs, with a cumulative green roof area of 2,800m².

Thus, as at 31st March 2026, the City of London is projected to include green roof spaces comprising of:

- 82 sites with extensive green roofs only, with an aggregate green roof area of 33,500m²;
- 33 sites with intensive green roofs only, with an aggregate green roof area of 21,400m², and
- **18** sites with extensive and intensive green roofs, with an aggregate green roof area of 15,200m².



4. Public Access

Introduction

This section analyses access to roof spaces in the City of London, in terms of public access and inclusive access. The **Roof Terraces and Green Roofs Audit Report** defines all public access categories.

Past Completions (2011/12 to 2019/20)

This section analyses public access to roof space completed up to 2019/20:

- Graph 4-1 illustrates statistics, and
- Appendix 1 (Table A-1-3) provides the detailed statistics.



Graph 4-1: Access to Roof Spaces in the City of London (2011/12 – 2019/20)

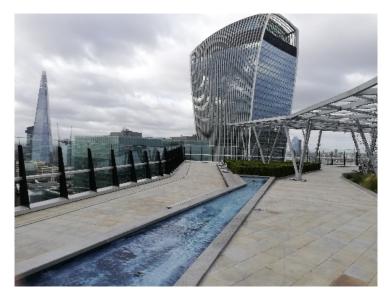
As at 31st March 2011, roof spaces in the City of London comprised:

- 4 with full public access;
- 6 with partial or limited public access;
- 28 with access for occupiers and tenants only; and
- 18 with green roofs only, and thus no access, except for maintenance purposes, primarily for security reasons.

Between the 2011/12 and 2019/20 periods, roof spaces without public access continued to be dominant. Thus, as at 31st March 2020, roof spaces in the City of London comprised of a range of sites:



• Six with full public access; examples include 120 Fenchurch Street (**Picture 4-1**) and Bassishaw Highwalk.



Picture 4-1: 120 Fenchurch Street (Site with Full Public Access)

• Nine with partial or limited public access; examples included Mint Hotel, 7 Pepys Street (**Picture 4-2**) and Tower Suites by Blue Orchid, 100 Minories.



Picture 4 2: Mint Hotel, 7 Pepys Street (Site with Limited Public Access)

• 61 with access for occupants and tenants; examples include 33 King William Street (**Picture 4-3**) and 2 Seething Lane.



Picture 4-2: 33 King William Street (Site with Access for Occupants and Tenants)

• 50 with green roofs only, and thus no access; examples include Exchange House, 12 Primrose Street (**Picture 4-4**) and Vintry and Mercer, 19 Garlick Hill.



Picture 4-3: Exchange House, 12 Primrose Street (Site with No Access)



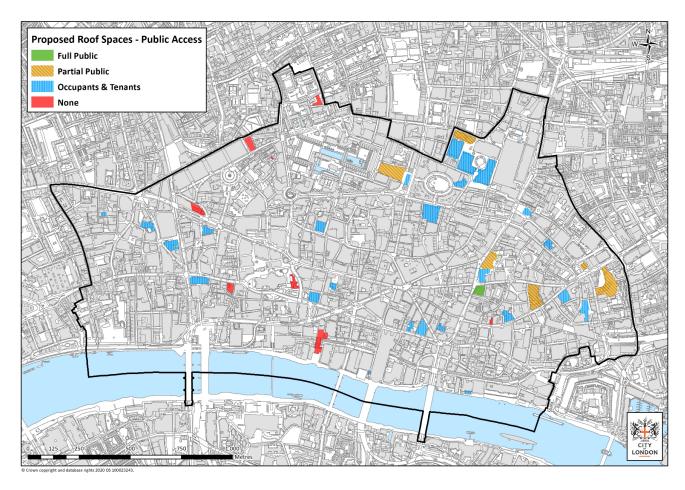
Projected Completions (2020/21 to 2025/26)

This section analyses public access to projected roof spaces in the City of London:

- **Graph 4-2** illustrates the statistics;
- Map 4-1 illustrates the spatial distribution;
- Appendix 1 (Table A-1-3) sets detailed statistics, and
- Appendix 2-1 lists individual sites.

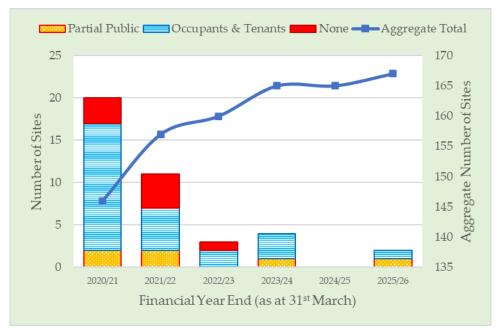
.





Map 4-1: Public Access to Projected Roof Spaces in the City of London (2020/21 to 2025/26)





Graph 4-2: Public Access to Projected Roof Spaces in the City of London (2020/21 to 2025/26)

The past trends are projected to continue, with a relatively small proportion of roof spaces providing full public access. As at 31st March 2026, roof spaces in the City of London are projected to include:

- 7 with full public access;
- 15 with partial or limited public access;
- 87 with access for occupants and tenants, and
- 58 with green roofs only, and thus no public access.



5. Green Walls

Introduction

This section analyses green walls in the City of London, based on year of completion and type.

Map 5-1 shows spatial distribution by financial year of completion.

Past Completions (2011/12 to 2019/20)

As at 31st March 2011, green walls in the City of London were located at four sites, in sporadic locations, as a result of new build schemes; these provided a cumulative green wall area of 1,900m².

Green walls completed between the 2011/12 and 2014/15 periods were located at 3 sites¹, primarily towards the south, at Mermaid Arts and Conference Centre, Puddle Dock (**Picture 5-1**), 2 Sky Garden Walk (**Picture 5-2**) and 52-56 Minories; these provided a cumulative area of approximately 1,000m².

Green walls completed between the 2015/16 and 2019/20 periods were located at four sites, providing a cumulative area of 1,200m². These comprised:

- An additional green wall at Mermaid Arts and Conference Centre;
- 1 London Wall Place;
- 2 London Wall Place; and
- Clerks Place.

Thus, as at 31st March 2020, there were 10 green walls in the City of London, with an aggregate wall area of 4,100m².

Appendix 2 (Table A-2-2) provides detailed statistics.

¹ Although a fourth green wall was completed at 22-24 Minories during this period, it was subsequently demolished as a result of works at 15-16 Minories; thus, the report statistics do not include it.

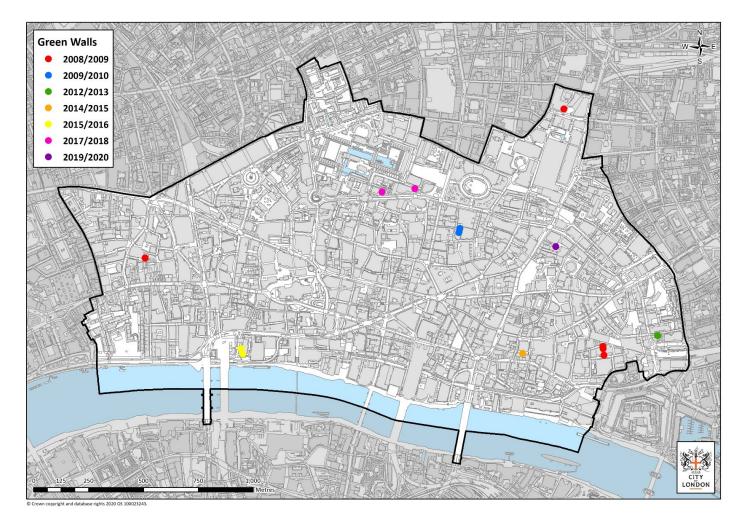




Picture 5-1: Mermaid Arts and Conference Centre, Puddle Dock



Picture 5-2: 2 Sky Garden Walk



Map 5-1: Green Walls in the City of London (up to 2019/20)



Green Wall Types

The **Roof Terraces and Green Roofs Audit Report** defines all green wall types. **Map 5.2** shows the spatial distribution of green walls analysed by type, as at 31st March 2020.

As at 31st March 2011, the City of London contained:

- Two sites with intensive green walls; and
- Two sites with semi-intensive green walls.

Between the 2011/12 and 2019/20 periods, green wall completions included:

- Five sites with intensive green walls; and
- One site with a free-standing green wall.

Projected Completions (2020/21 to 2025/26)

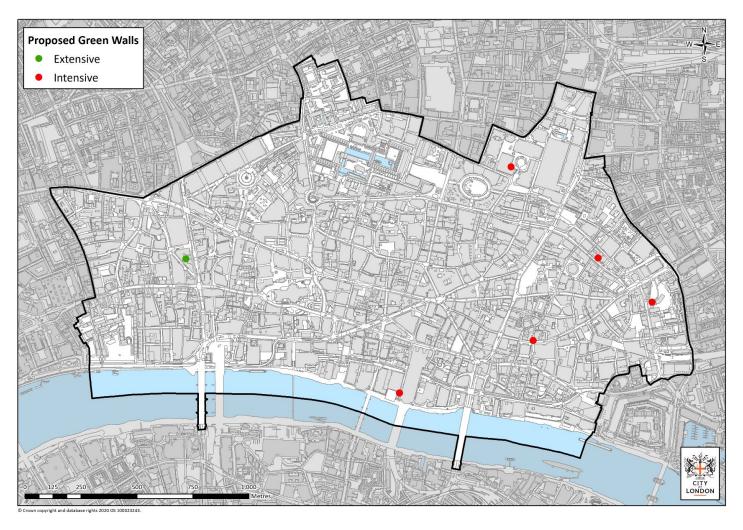
As **Map 5.2** shows, six green walls are projected as part of redevelopment schemes currently in the pipeline and projected for completion between the 2020/21 and 2023/24 periods; these will be primarily located towards the east of the City. No green walls are projected for completion during the 2024/25 and 2025/26 periods.

Appendix 2 (Table A-2-2) gives detailed statistics.

Green Wall Types

Most projected green walls in the City of London will be intensive (five sites); one extensive green wall will be provided at Stonecutter Court, 1 Stonecutter Street (projected for completion during the 2023/24 period).





Map 5-2: Projected Green Wall Types in the City of London (2020/21 to 2025/26)



6. Sustainability and Flood Risk

The **City of London Audit Report – Roof Terraces and Green Roofs** set details of how green roofs and green walls in the City of London contribute to:

- Improving biodiversity;
- Improving sustainability (e.g. reducing the urban heat island effect and energy consumption) and
- Flood risk mitigation.

The **audit** also sets out the policy context.

Projected green roof spaces will provide sustainability measures; for example:

- Robust plants, and native species that are of benefit to wildlife (e.g. at 60 London Wall);
- Photovoltaic panels (e.g. at 100 Liverpool Street);
- Rainwater attenuation (e.g. at 35 Vine Street) and
- Rainwater storage tanks (e.g. at 15-16 Minories)².

² The design and access statement refer to this as a 'blue roof'.



-

Appendices

Appendix 1: Statistics

Table A-1-1: Roof Terrace and Green Roof Completions and Projections

			Number of sites	Number of sites				
Year	Roof Terace	Roof Terrace	Green Roof Only	Annual	Aggregate at			
	Only	and Green Roof			Year End			
Before 2011/12	14	24	18	56	56			
2011/12	0	2	5	7	63			
2012/13	0	0	2	2	65			
2013/14	0	4	1	5	70			
2014/15	0	3	4	7	77			
2015/16	0	2	3	5	82			
2016/17	0	4	5	9	91			
2017/18	2	6	6	14	105			
2018/19	3	9	2	14	119			
2019/20	2	1	4	7	126			
Total 31/03/2020	21	55	50	126				
2020/21	10	7	3	20	146			
2021/22	2	5	4	11	157			
2022/23	0	2	1	3	160			
2023/24	1	4	0	5	165			
2024/25	0	0	0	0	165			
2025/26	1	1	0	2	167			
Total projected	14	19	8	41				
Total 31/03/2026	35	74	58	167				



Table A-1-2: Green Roof Types

		N	umber of site	es		Green Roof Space				
Year	Extensive	Extensive and Intensive	Intensive	Total for Year	Agggegate at Year End	Extensive	Extensive and Intensive	Intensive	Total for Year	Agggegate at Year End
						m ²	m ²	m ²	m ²	m ²
Before 2011/12	23	4	16	43	43	8,156	4,041	13,944	26,141	26,141
2011/12	3	2	2	7	50	3,572	1,374	113	5,058	31,199
2012/13	1	0	1	2	52	36	0	117	152	31,351
2013/14	3	0	2	5	57	592	0	941	1,533	32,885
2014/15	6	1	0	7	64	1,409	0	279	1,688	34,573
2015/16	3	2	0	5	69	979	2,290	372	3,642	38,215
2016/17	8	1	0	9	78	1,952	0	0	1,952	40,167
2017/18	8	1	3	12	90	3,301	120	1,474	4,895	45,062
2018/19	5	4	2	11	101	5,733	3,920	1,033	10,686	55,748
2019/20	4	1	0	5	106	141	687	332	1,159	56,907
Total as at	64	16	26	106		25,872	12,431	18,604	56,907	
31/03/2020										
2020/21	8	1	1	10	116	4,313	1,176	434	5,923	62,830
2021/22	6	0	3	9	125	880	0	0	880	63,710
2022/23	2	0	1	3	128	1,341	0	438	1,779	65,488
2023/24	2	1	1	4	132	1,067	1,617	1,629	4,314	69,802
2024/25	0	0	0	0	132	0	0	0	0	69,802
2025/26	0	0	1	1	133	0	0	548	548	70,349
Total projected	18	2	7	27		7,601	2,793	3,048	13,443	
Projected Total 31/03/2026	82	18	33	133		33,473	15,224	21,653	70,349	



Table A-1-3: Public Access

Financial Year	Full Public Access	Partial or Limited Public Access	Access for Occupiers and Tenants	No Access				
Past Changes								
Before 2011/12	4	6	28	18				
2011/12	0	1	1	5				
2012/13	0	0	0	2				
2013/14	1	0	3	1				
2014/15	0	0	3	4				
2015/16	0	0	2	3				
2016/17	0	0	4	5				
2017/18	0	0	8	6				
2018/19	1	1	10	2				
2019/20	0	1	2	4				
Total (as at 31 st March 2020)	6	9	61	50				
	Pro	ojected Changes						
2020/21	0	2	15	3				
2021/22	0	2	5	4				
2022/23	0	0	2	1				
2023/24	1	1	3	0				
2024/25	0	0	0	0				
2025/26	0	1	1	0				
Total Projected	1	6	26	8				
Total (as at 31 st March 2026)	7	15	87	58				



Appendix 2: Projected Sites

Table A-2-1: Projected Roof Terraces and Green Roofs (2020/21) to 2025/26)

Address	Planning Permission	Projected Financial Year of Completion	Туре	Projected Area of Green Roof (m²)	Public Access
20 Finsbury Circus	16/01084/FULL	2020/21	Roof terrace	N/A	Occupants and tenants
100 Liverpool Street	14/01285/FULEIA	2020/21	Roof terrace and intensive green roof	800	Occupants and tenants
22 Bishopsgate	15/00764/FULEIA	2020/21	Roof terrace and intensive green roof	450	Partial public
60 London Wall	16/00776/FULMAJ	2020/21	Roof terrace and extensive green roof	400	Occupants and tenants
15-16 Minories	13/01055/FULMAJ	2020/21	Roof terrace and extensive green roof	850	Partial public



Address	Planning Permission	Projected Financial Year of Completion	Туре	Projected Area of Green Roof (m²)	Public Access
66 Shoe Lane	18/01004/FULL	2020/21	Roof terrace and extensive green roof	350	Occupants and tenants
80 Fenchurch Street	16/00146/MDC	2020/21	Roof terrace, and extensive and intensive green roofs	1,200	Occupants and tenants
Procession House, 55 Ludgate Hill	17/00897/FULL	2020/21	Roof terrace	N/A	Occupants and tenants
16 Old Bailey	18/00137/FULL	2020/21	Roof terrace	N/A	Occupants and tenants
25 Cannon Street	18/00859/FULL	2020/21	Roof terrace	N/A	Occupants and tenants
1 Finsbury Avenue	17/00230/FULL	2020/21	Roof terrace	N/A	Occupants and tenants
St. Paul's Cathedral School	16/00850/FULL	2020/21	Extensive green roof	1,600	None



Address	Planning Permission	Projected Financial Year of Completion	Туре	Projected Area of Green Roof (m²)	Public Access
60 Upper Thames Street	11/00572/FULMAJ	2020/21	Extensive green roof	1,700	None
3-4 Bartholomew Place	17/00875/FULL	2020/21	Roof terrace	20	None
150 Bishopsgate	17/00623/FULL	2020/21	Roof terrace and extensive green roof	100	Occupants and tenants
Garrard House, 31 Gresham Street	17/00585/FULMAJ	2020/21	Roof terrace	N/A	Occupants and tenants
Sherborne House, 119-121 Cannon Street	18/01370/FULL	2020/21	Roof terrace	N/A	Occupants and tenants
1 Bow Churchyard	19/00944/FULL	2020/21	Roof terrace	N/A	Occupants and tenants
5 Norwich Street	17/01273/FULL	2020/21	Roof terrace	N/A	Occupants and tenants



Address	Planning Permission	Projected Financial Year of Completion	Туре	Projected Area of Green Roof (m²)	Public Access
Blomfield House, 85 London Wall	19/00861/FULL	2020/21	Roof terrace	N/A	Occupants and tenants
150-153 Fenchurch Street	16/00345/FULMAJ	2021/22	Extensive green roof	40	None
St. Clements House, 27 Clement's Lane	16/00342/FULMAJ	2021/22	Roof terrace	N/A	Occupants and tenants
St. Botolph- without-Aldgate, Aldgate High Street	17/01054/FULL	2021/22	Roof terrace and extensive green roof	90	Restaurant patrons
130 Fenchurch Street	14/00496/FULMAJ	2021/22	Roof terrace and intensive green roof	200	Occupants and tenants
65 Holborn Viaduct	12/00105/FULMAJ ³	2021/22	Extensive green roof	700	None

³ A replacement planning permission was granted for this site subsequent to 31st March 2020.



Roof Terraces and Green Roofs

Address	Planning Permission	Projected Financial Year of Completion	Туре	Projected Area of Green Roof (m²)	Public Access
10 King William Street	14/00178/FULEIA	2021/22	Roof terrace and extensive green roof	250	Occupants and tenants
1 Creed Lane	14/00300/FULMAJ	2021/22	Extensive green roof	350	None
43 Golden Lane	16/00590/FULL	2021/22	Extensive green roof	150	None
49 Leadenhall Street	13/01004/FULEIA	2021/22	Roof terrace	N/A	Limited public
35 Vine Street	17/00239/FULMAJ	2021/22	Roof terrace and intensive green roof	350	Occupants and tenants
20 Cousin Lane	18/01263/FULL	2021/22	Roof terrace and extensive green roof	50	Occupiers and tenants
101 Moorgate	11/00773/FULEIA	2022/23	Roof terrace and extensive green roof	100	Occupants and tenants



Address	Planning Permission	Projected Financial Year of Completion	Туре	Projected Area of Green Roof (m²)	Public Access
6-8 Bishopsgate	15/00443/FULEIA	2022/23	Roof terrace and intensive green roof	250	Occupants and tenants
Farringdon East Elizabeth Line Station, Lindsey Street	13/00605/FULEIA	2022/23	Extensive green roof	550	None
Leadenhall Court, 1 Leadenhall Street	18/00740/FULEIA	2023/24	Roof terrace	N/A	Full access
21 Moorfields	17/01095/FULEIA	2023/34	Roof terraces, and extensive and intensive green roofs	1,300	Full access
10 Lower Thames Street	17/01287/FULL	2023/24	Roof terrace and extensive green roof	200	Restaurant patrons
Stonecutter Court, 1 Stonecutter Street	18/00878/FULMAJ	2023/24	Roof terrace and extensive green roof	850	Occupants and tenants



City of London Monitoring Report: Roof Terraces and Green Roofs

Address	Planning Permission	Projected Financial Year of Completion	Туре	Projected Area of Green Roof (m²)	Public Access
1-2 Broadgate	18/01065/FULEIA	2023/24	Roof terrace and intensive green roof	5,900	Occupants and tenants
2 Finsbury Avenue	16/00149/FULEIA	2025/26	Roof terrace and intensive green roof	550	Partial access
Bevis Marks House, 24 Bevis Marks	17/00330/FULMAJ	2025/26	Roof terrace	N/A	Occupants and tenants



Table A-2-2: Projected Green Walls (2020/21 to 2025/26)

Address	Planning Permission	Projected Financial Year of Completion	Туре
15-16 Minories	15/01067/FULL	2020/21	Intensive
150-153 Fenchurch Street	16/00345/FULMAJ	2021/22	Intensive
20 Cousin Lane	18/01263/FULL	2021/22	Intensive
Stonecutter Court, 1 Stonecutter Street	18/00878/FULMAJ	2023/24	Extensive
1-2 Broadgate	18/01065/FULEIA	2023/24	Intensive
Bevis Marks House, 24 Bevis Marks	17/00330/FULMAJ	2025/26	Intensive



Information

The material featured in this publication is subject to Crown copyright protection. Crown copyright material is reproduced with the permission of Her Majesty's Stationery Office (HMSO).

Queries regarding data for roof terraces and green infrastructures can be made to:

pln-moninfo@cityoflondon.gov.uk

Queries regarding policy issues can be made to: localplan@cityoflondon.gov.uk

General Planning Enquiries

Telephone: 020 7332 1710

E-mail: plans@cityoflondon.gov.uk

Internet site: https://www.cityoflondon.gov.uk/things-to-do

Director of the Built Environment

PO Box 270, Guildhall, London EC2

The City of London Corporation is the local authority for the financial and commercial heart of Britain, the City of London.

