WTC Tower Ten

Strawinskylaan 157-1679, 1077 XX

ActiveScore Formal Report 2024

17 April 2024 Ver 3.33

ACTIVESCORE Key Information

Commencement:	01/03/2023	01/03/2025
Organisation name:	CBRE Dutch Office Fund	
Site or building:	WTC Tower Ten	
Address:	Strawinskylaan 157-1679, 1077 XX	
Region:	Amsterdam Zone 2	
Maximum occupancy:	4,698	
Floor area:	505,634	sq ft
Floor area:	*46,975.00*	*sq m*
Date:	29/05/24	
Stage:	Formal	

Infrastructure Existing/Proposed

Occupant cycle parking	1,187
Visitor cycle parking	6,660
Number of showers	8
Number of lockers	80

Building Overview

WTC Tower Ten is a commercial development offering 505,634 sq ft of office space in the Zuidas district of Amsterdam. Zuidas is also known at the 'Financial Mile' and is a rapidly developing business district, with the expansion of WTC being a huge part of this. The development offers excellent transport links and is located directly by Amsterdam Zuid railway station which is served by rail, metro, and tram lines. Occupants choosing to actively travel to and from WTC Tower 10, will have access to 1187x secure cycle parking spaces, 80x lockers, modern showers for all genders, and a whole host of occupier engagement services and community building initiatives.

ACTIVESCORE Score Card for CBRE Dutch Office Fund: WTC Tower Ten

	Topic	Score	Max	Auditor notes	Suggestions for improvement
1.	Location of occupant active travel parking	5	5	Covered, secure, and in the building.	None
2.	Location of visitor cycle parking	5	5	A range of different internal cycle stores and external provisions within the local area, with a provision in 15m. Including Bike parking Zuidplein provided by the railway, Mathijs Vermeulenpad in the local area, and Bike parking Strawinskylaan also provided by the railway authority.	None
3.	Proportion of cycle parking to floor area	10	10	An excellent overprovision of occupant and visitor cycle parking vs floor area.	None
4.	Proportion of cycle parking to occupancy	10	10	An excellent overprovision of cycle parking vs occupancy.	None
5.	Variety	3	5	A range of two-tier racks, front-wheel racks, and vertical racks are provided on-site. Some open spaces are allocated for cargo bikes to be parked but no physical racks to attach to and shared with motorbikes.	To achieve full marks for this topic, irregular bike parking spaces and parking for alternative modes e.g. folding bike lockers, versatile lockers, or scooter racks/lockers need to be provided. Also, ideally cargo bikes should also have designed racks to attach to.
6.	Access, Routes, and Wayfinding	5	5	The cycle parking is provided directly underneath the office building and is set over 2-levels. There are multiple routes to access the cycle parking, including external sets of steps, internal steps with a wheel ramp, lifts, and direct corridors are available. Wayfinding is evident across the routes.	None
7.	Security and Lighting	4	5	1 layer of physical security (FOB access) appears to cover all routes to the cycle parking, CCTV, and PIR lighting across the facility.	To achieve full marks for this topic, 2 layers of physical security need to be in place across all routes to the cycle parking.
8.	Look and Feel	5	5	Welcoming entrances to the facilities with bright colour painting throughout and modern shower/changing facilities.	None
9.	Lockers and Storage	1	5	80x lockers are provided in a 5-high arrangement, with larger compartments on the top layer.	To achieve full marks for this topic, another 1345x lockers need to be in place, with the dominant provision offering hanging space.
10.	Showers	4	5	A good provision of gender-neutral showers but no DDA facility.	To achieve full marks for this topic, a DDA shower cubicle needs to be provided on-site.
11.	Changing rooms and amenities	3	5	Gender-neutral changing rooms with vanity units, hairdryers, and benches. No observed towel service or access to clean drinking eater.	To achieve full marks for this topic, a DDA changing facility needs to be provided and all amenities including a towel service and access to clean drinking water.
12.	Drying/Airing provision	1	5	No dedicated drying facilities by radiators are provided in each of the shower cubicles. Wasserette & Stomerij Clean Center also offers a dedicated ironing service on-site.	To achieve full marks for this topic, a well-ventilated and heated drying provision (e.g. dedicated drying room or drying cabinets) need to be provided on-site for all genders and users.
13.	Maintenance and repair station	4	5	A maintenance station with tools, pump, and a stand provided.	To achieve full marks for this topic, a puncture repair kit needs to be provided on-site. This can be held centrally (e.g. at reception) and offered out on request.
14.	Hire and pool bicycle/scooter schemes	5	5	Amsterdam has a whole host of bicycle and scooter hire schemes including Check scooters. WTC Amsterdam pool of hire bikes are also available on-site.	None
15.	Occupier Engagement Services	5	5	Some of the visitor cycle parking facilities in the area have a bike maintenance service which is advertised. Occupants on-site are also given a security tag and a tenant operated (Wasserette & Stomerij Clean Center) dry cleaning service is provided in the Atrium of the building.	None
16.	Information and Communication	5	5	An excellent approach to promotion of active travel facilities and services with a dedicated building website, Elevate app, and digital display screens are available on-site.	None
17.	Community Building	5	5	An excellent approach to community building initiatives and their promotion using SocialClub a whole host of events are organised annually with SocialRides and groups can be made on the Elevate app. A community team are also available on-site and Selin to potentially become the appointed active travel champion.	None
18.	Future-proofing	5	5	An overprovision of cycle parking vs floor area and occupancy.	None

ACTIVESCORE 85 / 100

AWARD Platinum

1. Location of occupant active travel parking

Summary	Auditor Notes	Guide	Score
Some provision of cycle parking for occupants on-site	Covered, secure, and in the building.	0 - 2	5
Active travel storage with roof and/or protection from weather		2 - 3	
Covered and secure active travel storage within 50m (160ft) of the building entrance		3 - 4	
Covered, secure, and in the building		4 - 5	

Guidance for client

See note [1]. Guidance states that active travel parking should be secure, convenient, and accessible for all occupants. Security can include CCTV and electronic access - this is further detailed in Topic 7. There is discretion in the scoring system for the auditor to mark for a wide variety of situations.

Suggestions for improvement

2. Location of visitor cycle parking

Summary	Auditor Notes	Guide	Score
No specific information or provision of visitor cycle parking	A range of different internal cycle stores and external provisions within the local area, with a provision in 15m. Including Bike parking Zuidplein provided by the railway, Mathijs Vermeulenpad in the local area, and Bike parking Strawinskylaan also provided by the railway authority.	0 - 2	5
Limited information and general on-street cycle parking nearby (25-50m/80-160ft)		2 - 3	
Information and provision of visitor cycle parking within the site		3 - 4	
Cycle parking for a variety of visitors within 15m (50ft) of main entrance		4 - 5	

Guidance for client

See note [1]. Visitors cover a wide range: contractors, casual users, clients, deliveries etc. Information for visitors needs to be available for staff to pass on. Provision of visitor cycle parking with step free access close to the main entrance is important in any case. Some visitors may be given access to occupant cycle parking but this is not a substitute for dedicated visitor cycle parking.

Suggestions for improvement

3. Proportion of cycle parking to floor area

Summary	Auditor Notes	Guide	Score
0 - 40% of occupant target		0 - 4	10
40 - 60% of occupant target		4 - 6	
60 - 80% of occupant target		6 - 8	
80 - 100% of occupant target and ≥50% of visitor target	An excellent overprovision of occupant and visitor cycle parking vs floor area.	8 - 10	

Parking	Target	Actual	%
Occupant	941	1187	126%
Visitor	19	6660	34339%

Guidance for client

The Amsterdam Memorandum on Parking Standards (2018) sets out cycle parking minima for a variety of developments. For offices in city zone 2, 2 spaces are required per 100m2. Also it states a minimum of 10 visitor spaces are required regardless of floor area. To meet the higher demand in a building above 5000m2, ActiveScore would require a further 1 visitor space per 5000m2 above the 5000m2 threshold (as comparable to the London standards). Occupant cycle parking

Suggestions for improvement

4. Proportion of cycle parking to occupancy

Summary	Auditor Notes	Guide	Score
0 - 4.5% of occupancy		0 - 4	10
4.5 - 7.5% of occupancy		4 - 6	
7.5 - 10.5% of occupancy		6 - 8	
10.5 - 15% of occupancy	An excellent overprovision of cycle parking vs occupancy.	8 - 10	

	Target	Actual
spaces	705	1187
% occ	15%	25%

Guidance for client

ECF Occupancy target of 1.5 spaces per 10 staff. Cycle parking spaces must exceed 15% of the estimated maximum occupancy. This is of particular importance for new developments, to ensure buildings are future proofed at planning stages. Also see note [3].

Suggestions for improvement

5. Variety

Summary	Auditor Notes	Guide	Score
One space per bike with adequate locking points		0 - 2	3
Variety of parking for different types of cycles		2 - 3	
Variety of parking, accessible parking, E-Bike zones, and parking for alternative modes of transport (scooters)		3 - 4	
Storage for all modes of active transport including 15% irregular, 5% oversized and 20% E-Bike charging		4 - 5	

Storage	Target	Actual	%
Irregular (15%)	178	0	0%
Oversized (5%)	59	60	6%
E-Bike (20%)	237	350	30%

A range of two-tier racks, front-wheel racks, and vertical racks are provided on-site. Some open spaces are allocated for cargo bikes to be parked but no physical racks to attach to and shared with motorbikes.

Guidance for client

See note [4]. Cycle stands should have locking points so that both wheels and the frame can be secured. A variety of parking should be provided to accommodate all modes of active transport including: folding bike lockers, 15% Sheffield stands at 1000mm (40 inch) centres for irregular/bulky parking (e.g. fat bikes, bikes with baskets etc.), 5% Sheffield stands at 2000mm (80 inch) centres and 2500mm (100 inch) clear length, catering for longer (e.g. tandems, cargo bikes etc.) and wider (e.g. trikes, recumbents etc.) cycles, 20% E-Bike charging points and scooter racks/lockers. For further information please see our best-in-class document.

Suggestions for improvement

To achieve full marks for this topic, irregular bike parking spaces and parking for alternative modes e.g. folding bike lockers, versatile lockers, or scooter racks/lockers need to be provided. Also, ideally cargo bikes should also have designed racks to attach to.

6. Access, Routes, and Wayfinding

Summary	Auditor Notes	Guide	Score
Complex route, no wayfinding, unsuitable surface	The cycle parking is provided directly underneath the office building and is set over 2-levels. There are multiple routes to access the cycle parking, including external sets of steps, internal steps with a wheel ramp, lifts, and direct corridors are available. Wayfinding is evident across the routes.	0 - 2	5
Appropriate surface with easy to follow route		2 - 3	
Little or no steps, easily navigated route supported by wayfinding		3 - 4	
Marked out traffic free route direct to active travel parking and into the building		4 - 5	

Guidance for client

See note [1+5] on surface quality. Actively commuting to and from the parking should be separated from all vehicular traffic, with level access, and clear wayfinding in place. All forms of active travel should be considered when designing the route e.g., walking, running, scooting, etc. For further information please see our best-in-class document.

Suggestions for improvement

7. Security and Lighting

Summary	Auditor Notes	Guide	Score
No specific arrangements	1 layer of physical security (FOB access) appears to cover all routes to the cycle parking, CCTV, and PIR lighting across the facility.	0 - 2	4
CCTV and well-lit		2 - 3	
1 layer of security, well-lit, and CCTV		3 - 4	
2 layers of security, PIR lighting, and CCTV		4 - 5	

Guidance for client

For BREEAM In-Use (TRA 01): for 1 credit, essential compliance to have "well-lit" active travel parking, the Lighting Energy Numeric Indicator (LENI) recommends a minimum of 60 luminaire lumens per circuit watt for general lighting in office, industrial, and storage areas. Lighting should be reactive to cover out-of-hours access. Secure by Design (commercial 2015) Lighting & CCTV - A CCTV system should be co-ordinated with the existing or planned lighting system for the buildings and the external grounds, to ensure that the quality of the lighting is sufficient to support the CCTV. For best practice a facility should have 2 physical layers of security e.g. locked doors, access controlled gates/lifts, or speed gates etc.

Suggestions for improvement

To achieve full marks for this topic, 2 layers of physical security need to be in place across all routes to the cycle parking.

8. Look and Feel

Summary	Auditor Notes	Guide	Score
Clean and tidy	Welcoming entrances to the facilities with bright colour painting throughout and modern shower/changing facilities.	0 - 2	5
Minimal design efforts observed		2 - 3	
A considered effort to create a welcoming environment in the active travel storage or shower/changing areas		3 - 4	
A cohesive design throughout all of the active travel facilities		4 - 5	

Guidance for client

Although there are no official guidelines on best practice for designed out end of trip facilities, it does play an important role in making active travel accessible and/or appealing for all. A well thought-out, attractive, vibrant space will often entice users to participate in active lifestyles. For further information please see our best-in-class document.

Suggestions for improvement

9. Lockers and Storage

Summary	Auditor Notes	Guide	Score
0 - 50% lockers per cycle space in the building for occupants		0 - 2	1
50 - 100% lockers per cycle space		2 - 3	
100 - 120% lockers per cycle space - vented and room for hanging clothes		3 - 4	
≥120% lockers per cycle space provided for all genders and users (ideally 100% of which are 2-high, 20% can be smaller compartments)		4 - 5	

Location	Target	Actual	
Male		0	
Female		0	
Communal		80	
Total	**1425**	**80**	7%

80x lockers are provided in a 5-high arrangement, with larger compartments on the top layer.

Guidance for client

See note [6]. At least 1 locker compartment (from a 2-high unit) should be provided for each active travel parking space. An additional 20% lockers will be required for additional users including those who run to work or play sport at lunchtime, these can be made up of 3 or 4-high units. Active commuters should have space to securely store their belongings. Best practice would be to provide lockers with ventilation (e.g. perforated) with digi-locks and ideally provided communally. For further information please see our best-in-class document.

Suggestions for improvement

To achieve full marks for this topic, another 1345x lockers need to be in place, with the dominant provision offering hanging space.

10. Showers

Summary	Auditor Notes	Guide	Score
0 - 5% showers per cycle space in the building for occupants		0 - 2	4
5 - 10% showers per cycle space		2 - 3	
≥10% comfortable showers per cycle space for male, female and DDA users or 8+		3 - 4	
≥10% private showers per cycle space for all genders and DDA users or 8+	A good provision of gender-neutral showers but no DDA facility.	4 - 5	

User/Type	Target	Actual	
Male/Female		0	
Gender Neutral		8	
Accessible	1	0	% cs
Total	**8**	**8**	1%

Guidance for client

See note [7]. BREEAM Guidance - 1 shower should be provided for each 10 occupant cycle parking spaces until 8 showers. If occupant cycle parking quantities exceed the targets set in Topics 3 & 4, 10% showers are expected vs the highest target only. One disabled shower and changing room should be accessible from the office and cycle parking area. Cubicles should have space for changing within or be in a gender specific changing room. Showers need to be provided for all genders and users - male, female, gender neutral and DDA (accessible) separately. Alternatively, an entirely unisex facility (with private cubicles) and DDA facilities would be accepted.

Suggestions for improvement

To achieve full marks for this topic, a DDA shower cubicle needs to be provided on-site.

11. Changing rooms and amenities

Summary	Auditor Notes	Guide	Score
No specific arrangements	Gender-neutral changing rooms with vanity units, hairdryers, and benches. No observed towel service or access to clean drinking eater.	0 - 2	3
Communal changing facility or some amenities including benches, vanity units, and hairdryers		2 - 3	
Dedicated gendered and DDA changing facilities including benches, vanity units, hairdryers, and towel service		3 - 4	
Dedicated changing facilities for all genders and users with all amenities and access to clean drinking water		4 - 5	

Guidance for client

BREEAM: Appropriately sized for the likely/required number of users. Changing areas must include benches, vanity units, and hairdryers. A provision of freshly laundered towels shows a high standard of provision. Communal facilities are not recommended as there is no privacy for users, whereas dedicated spaces segregate individuals. Changing facilities need to be provided for all genders and users - male, female, gender neutral and DDA (accessible) separately. Alternatively, an entirely unisex facility (with private cubicles) and DDA facilities would be accepted. We would recommend offering access to clean drinking water through taps or refill stations.

Suggestions for improvement

To achieve full marks for this topic, a DDA changing facility needs to be provided and all amenities including a towel service and access to clean drinking water.

12. Drying/Airing provision

Summary	Auditor Notes	Guide	Score
No specific arrangements	No dedicated drying facilities by radiators are provided in each of the shower cubicles. Wasserette & Stomerij Clean Center also offers a dedicated ironing service on-site.	0 - 2	1
Clothes stands or heated lockers used		2 - 3	
Specific provision for drying clothes, i.e. drying room or cabinet		3 - 4	
A well-ventilated and heated drying provision with an ironing station provided for all genders and users		4 - 5	

Guidance for client

Airing rooms can be considered in the place of a drying room in unique cases e.g. equatorial countries. Provision of facilities to dry clothes can help those who actively commute to work, or those who have an active lifestyle. Washing and airing wet clothes is important and ironing services are popular among clients. Heated lockers are not the ideal provisions as it defines the amount of people who have access to the drying provisions. See note [8].

Suggestions for improvement

To achieve full marks for this topic, a well-ventilated and heated drying provision (e.g. dedicated drying room or drying cabinets) need to be provided on-site for all genders and users.

13. Maintenance and repair station

Summary	Auditor Notes	Guide	Score
No specific arrangements	A maintenance station with tools, pump, and a stand provided.	0 - 2	4
Communal bicycle pump or air line		2 - 3	
Communal bicycle pump and tools		3 - 4	
Bicycle repair area with pump, a variety of tools including a puncture kit, and stand		4 - 5	

Guidance for client

Good practice is to provide an area where bicycles can be adjusted or repaired, and best practice is to include a bicycle stand, pump (or air line), and a variety of tools including a puncture kit which can be kept centrally e.g. at reception. There are commercially available work stations with integrated bicycle pump and tools attached. For further information please see our best-in-class document.

Suggestions for improvement

To achieve full marks for this topic, a puncture repair kit needs to be provided on-site. This can be held centrally (e.g. at reception) and offered out on request.

14. Hire and pool bicycle/scooter schemes

Summary	Auditor Notes	Guide	Score
No specific arrangements	Amsterdam has a whole host of bicycle and scooter hire schemes including Check scooters. WTC Amsterdam pool of hire bikes are also available on-site.	0 - 2	5
A bicycle or scooter hire option nearby		2 - 3	
More than one bicycle or scooter hire option available nearby		3 - 4	
Variety of pool bicycles/scooters available on-site for occupant use		4 - 5	

Guidance for client

See note [4]. Pool bicycles/scooters are a centrally provided hire option. Use varies from longer term loans, to attending meetings or for emergency use to get home. If possible, they should be supplied with lights, helmets, and locks. On-street bicycle/scooter hire is counted, but best provision is a range of sizes and types of active transport, including folding bicycles for multi-modal commuting. For further information please see our best-in-class document.

Suggestions for improvement

15. Occupier Engagement Services

Summary	Auditor Notes	Guide	Score
No specific arrangements	Some of the visitor cycle parking facilities in the area have a bike maintenance service which is advertised. Occupants on-site are also given a security tag and a tenant operated (Wasserette & Stomerij Clean Center) dry cleaning service is provided in the Atrium of the building.	0 - 2	5
Information provided on one external service		2 - 3	
Two services offered per year and information made available for occupants		3 - 4	
Two services offered regularly per year and a dry cleaning service in place or advertised		4 - 5	

Guidance for client

There are a wide range of services and suppliers that will ensure active lifestyles are accessible for all, including:
- Regular Dr Bike (mobile bicycle mechanic on-site)
- Insurance and collision advice
- Security Marking (bicycle registration)
- Cycle training or advice
- Discounts/Incentives for actively commuting

A dry cleaning service can be provided by the building, or a local company advertised.

Suggestions for improvement

16. Information and Communication

Summary	Auditor Notes	Guide	Score
No specific arrangements	An excellent approach to promotion of active travel facilities and services with a dedicated building website, Elevate app, and digital display screens are available on-site.	0 - 2	5
1 media platform available to available to inform all types of occupants and visitors		2 - 3	
Up to 3 media platforms available to inform all types of occupants and visitors		3 - 4	
A smart building app, or at least 3 media platforms, available to inform all types of occupants and visitors		4 - 5	

Guidance for client

Active travel facilities should be clearly advertised and easily accessible for both active commuters and non-active commuters within the building. Information and communication should be supported by a variety of media. These provisions can range from: smart building apps, digital display screens, print media, social media, email newsletters or new tenant welcome packs.

Suggestions for improvement

17. Community Building

Summary	Auditor Notes	Guide	Score
No specific arrangements	An excellent approach to community building initiatives and their promotion using SocialClub a whole host of events are organised annually with SocialRides and groups can be made on the Elevate app. A community team are also available on-site and Selin to potentially become the appointed active travel champion.	0 - 2	5
Appointed active travel champion or active lifestyle group		2 - 3	
Appointed active travel champion and active lifestyle group		3 - 4	
Well-publicised dedicated community that encourages new active commuters		4 - 5	

Guidance for client

An active travel community will help provide information, encouragement, and support to existing active commuters or those who wish to start. Setting up an active user group such as a bicycle user group or lunchtime running group will form a platform for active commuters to meet - with the aim of enabling as many people as possible to adopt an active lifestyle and to take it up for leisure. Buddying will give confidence to those who are new to commuting by an active transport mode. An active travel champion is an appointed person who can assist with booking events, renting out any on-site hire bike/scooter provisions, offering advice and support, managing/setting up the active bicycle user group, and encouraging occupants to engage with the active travel facilities etc.

Suggestions for improvement

18. Future-proofing

Summary	Auditor Notes	Guide	Score
Space identified or plan in place for expansion	An overprovision of cycle parking vs floor area and occupancy.	0 - 2	5
Cycle parking quantity targets met vs floor area and occupancy (Topics 3 & 4)		2 - 3	
Some overprovision of cycle parking either vs floor area or occupancy		3 - 4	
An overprovision of cycle parking vs floor area and occupancy in place		4 - 5	

Guidance for client

See note [9]. Active commuting numbers are growing and are expected to continue to rise. If active travel parking is exceeded an overflow area can be identified, and this could be used to create additional capacity. **Continuing to renew your ActiveScore Certification will ensure facilities are appropriately reviewed and future-proofed.**

Suggestions for improvement

[1] Occupant and visitor active travel parking

PRESTO Cycling Policy Guide (2010) and the DfT Cycling Infrastructure Design LTN 1/20
details cycle parking from a technical perspective through to quantity guidelines. One important principle is that parking is accessible to all users, including a variety of less conventional cycles (e.g. trikes and recumbents) and accessible parking should total at least 5% of the overall active travel parking provision. Access should be step-free. A variety of occupant and visitor parking should be provided in convenient locations to cover those who visit and use the site. Occupant active travel parking refers to long stay parking which is available privately and securely to occupants of the building, while visitor active travel parking refers to short stay cycle parking available to visitors to the building either provided by the building or by the local authority. Visitor cycle parking should have step free access and be within 15m (50ft) of the main entrance, or 25m (80ft) where it serves multiple sites. Occupant parking must be well-lit, as outlined by Lighting Energy Numeric Indicator (LENI) the recommended general lighting is a minimum of 60 luminaire lumens per circuit watt for offices, industrial, and storage areas.

[2] Cycle parking vs. floor area

Occupant cycle parking refers to long stay cycle parking while visitor cycle parking refers to short stay cycle parking.
The Amsterdam Memorandum on Parking Standards (2018) sets out cycle parking minima for a variety of developments. For offices in city zone 2, 2 spaces are required per 100m2. Also it states a minimum of 10 visitor spaces are required regardless of floor area. To meet the higher demand in a building above 5000m2, ActiveScore would require a further 1 visitor space per 5000m2 above the 5000m2 threshold (as comparable to the London standards).

[3] Cycle parking vs. occupancy

ECF Occupancy target of 1.5 spaces per 10 staff
Other accreditations benchmark against the following:
WELL CERTIFICATION: OPTIMISATION (69): separate and secure bicycle storage for at least 5% of regular building occupants, as well as visitor bicycle storage for at least 2.5% of all peak visitors.
BREEAM: complaint occupant cycle storage facilities must be provided, 10% cycle parking spaces for a total occupancy of up to 500, 7% cycle parking spaces for a total occupancy of 501-1000, and 5% cycle parking spaces of a total occupancy of 1000+ people. While for visitors, buildings must provide 5% of the number of visitor car parking spaces for visitor cycle parking.

[4] Variety of cycle parking

PRESTO Cycling Policy Guide (2010) and the DfT Cycling Infrastructure Design LTN 1/20
contains detailed technical advice on cycle parking with particular reference to Sheffield stands, gas assisted two tier racks and enclosures. It also includes detailed advice on the spacing of stands and recognises new space saving solutions such as wall mounted hangers. All parking should include locking points for the frame and both (all) wheels, be gas assisted if a two tier rack, and be under good surveillance or CCTV.
ActiveScore recommends 15% of storage is made up of parking for a variety of irregular/bulky bikes (Sheffield stands at 1000mm or 40 inch centres), plus 5% Sheffield stands at 2000mm (80 inch) centres and 2500mm (100 inch) clear length, catering for longer and wider cycles, (e.g. tandems, trikes, recumbents and cargo bikes, etc.), and 20% of spaces should offer E-Bike charging (50% of these can be charging lockers). E-bike racks will require at least a 50 amp supply to a 240v single-phase commando socket with rotary isolation and FB Padlock. All modes of active travel parking should be considered with racks/locker provisions for scooters, skateboards, and roller-skates etc. ActiveScore also recommends providing an on-site pool of hire bikes/scooters, while there are no ideal quantities, good practice would be to provide 3+ to offer sufficient availability for occupants of the building.
BREEAM Construction Credit (CN 3.8): Compliance requires adequate spacing, with secure and accessible fixings for frame and wheel in a prominent location viewable or overlooked by an occupied building. Parking should include power points to charge e-bikes. Sheffield stands should have >80cm (>30 inch) spacing.

[5] Route

PRESTO Cycling Policy Guide (2010) and the DfT Cycling Infrastructure Design LTN 1/20
deals with the construction of cycle routes and includes surfacing. The default should be asphalt but any surface should be skid resistant with a PSV (polished stone value) of 55+. The standard adopted by the EU and outlined within German Institute for Normalization (DIN) standard DIN 51130, notes that to achieve effective anti-slip flooring, a recommended R rating of R12 for an angle of inclination of 27° to 35°and R13 for >35° need to be in place to ensure the safety of occupants choosing to actively commute to and from the building. Attention should also be paid to drainage and maintenance, especially to remove sharp fragments and debris, and to keep the surface level. Access hole covers and ironworks need to be well maintained and can be a skid hazard. Wheeling ramps should be at least 100mm (4 inch) wide and 50mm (2 inch) deep, and mounted at least 200mm (8 inch) away from the wall. The route to and from the cycle store should be accessible for all users and any in place ramps must be wheelchair compliant. Lifts should be in place as an alternative for DDA users who may be obstructed by steps, the lifts should offer sufficient space for irregular/bulky bikes.

[6] Lockers

ActiveScore requires ≥120% lockers per cycle space, ideally 100% of which are 2-high while the remaining 20% can be made up of smaller compartments, this is in line with the requirements outlined by WELL V1.0. ActiveScore chooses to align with WELL V1.0, as the WELL V2.0 locker requirements have reduced and they now benchmark against shower quantities, which we do not deem as sufficient for the storage of all active commuters beyond the cyclist. Digi-locks are recommended for the ease of management of the facilities.
WELL CERTIFICATION V1.0: OPTIMISATION (69): one locker for every 5 regular building occupants, or evidence that the lockers provided exceed demand by at least 20%.
BREEAM: for compliance, lockers should be a) at least equal to the number of active travel parking spaces required, b) in or close to the changing room(s) c) sized appropriately for storing active commuter equipment.

[7] Changing rooms and shower provision

ActiveScore requires 10% showers vs cycle parking spaces, this is in line with the requirements outlined by BREEAM and planning guidance for new developments.
BREEAM: Compliance requires one shower for every 10 cycle storage spaces (min. 1 shower). Above 8 will comply regardless of number of storage spaces. Changing facilities should be appropriately sized for the number of users (assessor judgement).
BCO guidance - 1 shower per 100 staff.
WELL CERTIFICATION: OPTIMISATION (69): one shower with changing facility for the first 100 regular building occupants and one additional shower for every 150 regular building occupants thereafter.
LEED: Compliance requires at least 1x on-site shower for the first 100 occupants and +1 shower for each 150 occupants thereafter.

[8] Drying provision

ActiveScore requires a dedicated drying provision and additionally a dry cleaning service in place or local company advertised, this is in line with the requirements outlined by BREEAM. Drying cabinets can be installed in the cycle store as an alternative for a dedicated drying room. Airing cupboards are only sufficient if they offer heating and ventilation within.
For BREEAM In-Use (TRA 01): Ventilated drying area to hang wet clothes in a sheltered space. 4 credits when in combination with shower facilities, lockers and well-lit active travel parking. Area must be specially designed and designated with adequate heating.

[9] Future proofing

ActiveScore requires allocating space for future expansion when both cycle parking against occupancy and floor space targets have not been met, this is in line with the requirements outlined by London Cycling Design Guidance (LCDS).
LCDS recommends that the right amount of active travel parking for a site would be at a level that:
- Meets existing baseline demand
- Meets the potential demand generated by the existing and proposed land uses in the area
- Ensures there further is allowance for spare capacity (ideally, at least 20 per cent)

ACTIVESCORE ActiveScore Clean Air Calculator for WTC Tower Ten

This is a clean air calculator to help assets calculate the Scope 3 emissions (carbon and particulates) of their occupants' commute to work.

Total occupancy 4698
Total commuting trips 9395

REGIONAL AVERAGE COMMUTING CONSUMPTION

Mode	%*	Journeys	Avg. distance km	CO_2e Emission factor	kg CO_2e	$PM_{2.5}$ Emission factor	g $PM_{2.5}$	Notes
Walk	6	591	2.2	0	0	0	0	
Bicycle	31	2895	4.7	0	0	0	0	
Car	42	3959	24.4	0.16688	16140	0.018	1741	
Bus	3	295	13.8	0.07832	319	0.088	359	
Tram/lightrail/metro	3	295	13.8	0.0278	113	0.01316	54	
National train	6	591	36.1	0.03546	757	0.015464	330	
Other	8	768	13.8	0.113674	1204	0.013	138	
Daily Total	**100**	**9395**	**151,650**		**18534**	**kg CO_2e**	**2621**	**g $PM_{2.5}$**
Annual		**2,189,035**	**35,334,467**		**4,318.34**	**t CO_2e**		

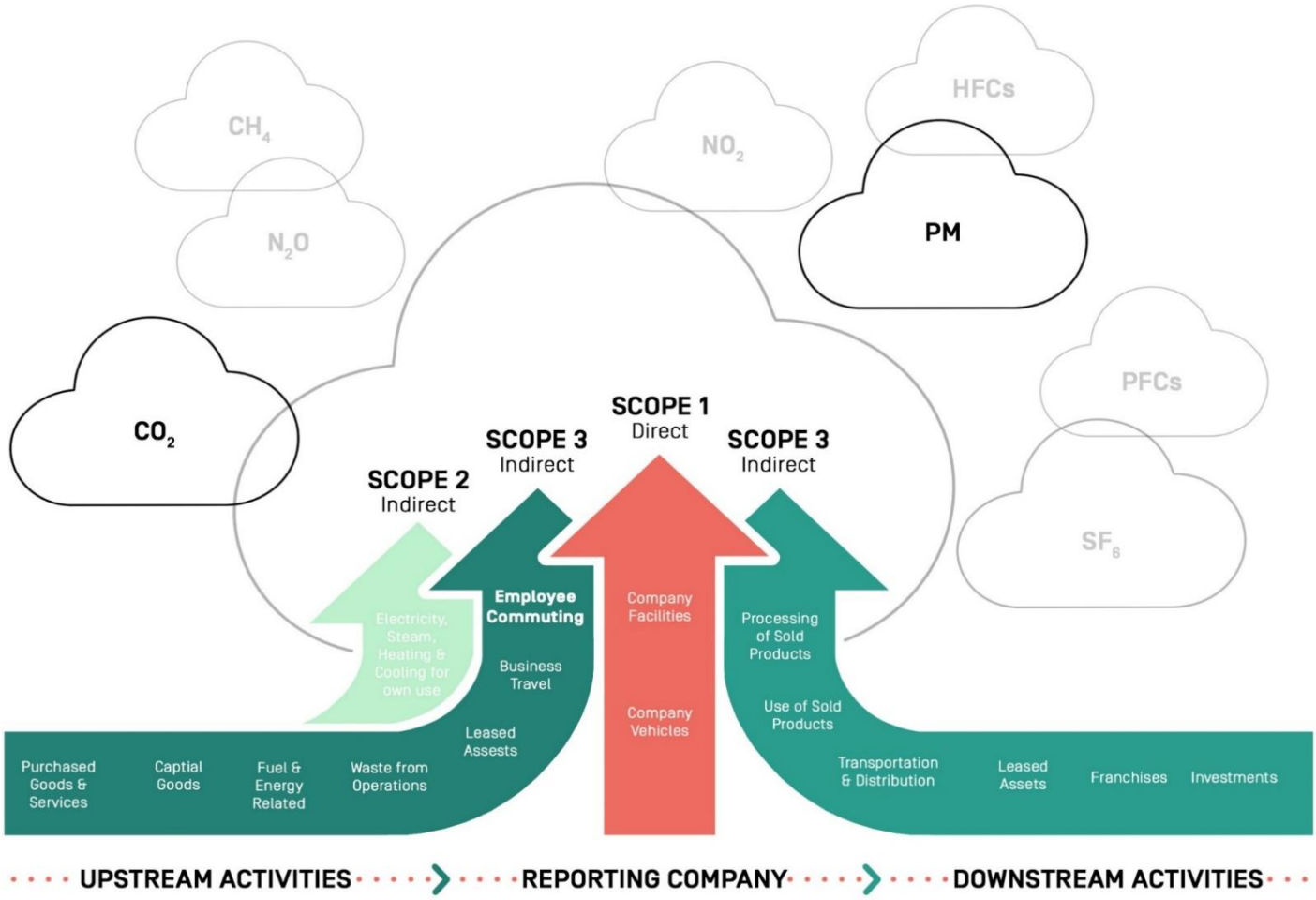
YOUR BUILDING'S TARGET COMMUTING CONSUMPTION

Mode	%*	Journeys	Avg. distance km	CO_2e Emission factor	kg CO2e	$PM_{2.5}$ Emission factor	g $PM_{2.5}$	Notes
Walk	7	638	2.2	0	0	0	0	
Bicycle	25	2374	4.7	0	0	0	0	An offering of 25% cycle parking
Car	46	4276	24.4	0.16688	17434	0.018	1881	
Bus	3	319	13.8	0.07832	345	0.088	387	
Tram/lightrail/metro	3	319	13.8	0.0278	122	0.01316	58	
National train	7	638	36.1	0.03546	818	0.015464	357	
Other	9	830	13.8	0.113674	1301	0.013	149	
Daily Total	**100**	**9395**	**160,294**		**20020**	**kg CO_2e**	**2831**	**g $PM_{2.5}$**
Annual		**2,189,035**	**37,348,576**		**4,664.70**	**t CO_2e**		

Tonnes of CO_2 e emissions saved	**-346.36**	**-8.0**	**% reduction of $PM_{2.5}$ emissions**

The aim for an asset is to increase the modal share of walking and cycling. This clean air calculator helps calculate the carbon and particulate savings that result from this. If an asset grows in size (number of occupants), then it is possible the transport emissions will also increase, even if more people are walking and cycling. The saving totals are calculated with the assumption bicycle parking is fully utilised. The clean air caculator focuses on primary modes of transport, *'Other'* encompasses transport such as motorcycle, taxi, and ferry - for this the CO2 Emission factor is for a motorcycle as this is the most common *'Other'* mode. We encourage clients to do their own travel survey to fully utilise this tool.

Improving the health of our cities



Air pollution is a complete mix of gases and particulates [PM] of both natural and human origin, if not reduced it will continue to cause a major threat to human health and many environmental impacts such as global warming.

Poor air quality is the largest environmental risk to public health, as long term exposure to air pollution can cause chronic conditions including cardiovascular and respiratory disease and lung cancer - as the fine particulates, in particular $PM_{2.5}$, can pass through the lungs into the bloodstream.

Company emissions can be categorised into:
Scope 1 - direct emissions the company makes, such as fuelling the boiler.
Scope 2 - emissions made indirectly, such as the electricity for lighting in the office.
Scope 3 - associated emissions, such as buying products from suppliers and staff commuting.

For most companies, Scope 3 emissions represent a much greater proportion of their carbon footprint than operational emissions [Scope 1 and Scope 2]. They're also something they have much less control over.

In the UK, transport alone makes up 27% of all CO_2e emissions[1] and 16% of all $PM_{2.5}$ emissions.[2]

Incentives to use public transport, car sharing, management's attitude to home working, and most importantly encouraging active travel - can all help reduce staff commuting emissions.

1) Transport and Environment Statistics 2021 Annual Report, Department for Transport [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/984685/transport-and-environment-statistics-2021.pdf]
2) Health matters: air pollution, Public Health England 2018 [https://www.gov.uk/government/publications/health-matters-air-pollution]

Thanks to your commitment to active travel…

CLEAN AIR

-346.36 tonnes of CO_2e emissions saved

-8% reduction of $Pm_{2.5}$ particulate emissions

compared to the average office in your region.

[See our Clean Air Calculator for further details]

HEALTH & WELLBEING

There is increasing evidence of air pollution having a potential role in causing asthma, impacting all age groups from birth. Around two thirds of people with asthma say poor air quality makes their asthma worse, putting them at risk of an asthma attack.[1]

Adults participating in daily physical activity have a **30%** lower risk of depression.[2]

On average cyclists take **1.3** fewer sick days per year than non-cyclists.[3]

82% of commuters surveyed reported being less stressed after cycling to work.[4]

1) Air Pollution and asthma, Asthma UK 2020 [https://www.asthma.org.uk/advice/triggers/pollution/]
2) Key benefits of regular physical activity as outlined in: UK Chief Medical Officers' Physical Activity Guidelines 2019 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf]
3) Hendriksen, I. et al [2010]. The association between commuter cycling and sickness absence.
4) Cycling and the mental health benefits, survey results produced by Cyclescheme, 2019 [https://www.cyclescheme.co.uk/community/featured/cycling-and-the-mental-health-benefits]

ACTIVESCORE Reference: Amsterdam Zone 2

Score Levels		
From	To	Level
1	39	Certified
40	59	Silver
60	79	Gold
80	99	Platinum
100	100	Platinum 100

m^2 to sq ft calc	10.7639
sq ft to m^2 calc	0.09290304

References
ECF Occupancy target of 1.5 spaces per 10 staff
2018 Amsterdam Memorandum on Parking Standards, Bicycle
2021 London Plan
2022 Mobility; per person, modes of travel, purposes of travel an
2022 Mobility; per trip, modes of travel, purposes of travel and re

Cycle Parking Quantity Calculator		
15	% of max occupancy target =	705
	Occupant target vs floor area =	941
	Visitor target vs floor area =	19

CARBON FACTORS -
2023 UK figures (it is assumed other developed countries' transport carbon factors will be comparable)

Mode	Direct emission factor kg CO2 per passenger km	2023 Defra C02e Factors, Excel full set (for adv users) - 'Business travel -
Car: average (diesel/petrol)	0.16688	
Local London bus (passenger.km)	0.07832	
London underground	0.0278	
National rail	0.03546	
Other (Motorcycle: average)	0.113674	

PARTICULATE ($PM_{2.5}$) EMISSION FACTORS -
2019 - 2021 UK figures (it is assumed other developed countries' transport emission factors will be comparable)

Mode	Direct emission factor g PM2.5 per passenger km	2021 National Atmospheric Emissions Inventory (NAEI) Fleet
All cars: Urban (+Tyres+Brakes+Abrasion)	0.018	
Buses (+Tyres+Brakes+Abrasion)	0.088	
Light rail (Power line+Tyres+Brakes)	0.01316	2020 EEA Non-exhaust PM-emissions
40% Electric Regional rail (+Power line+Tyres+Brakes)	0.015464	019 NAEI Railway PM Emission Factors
Other (Motorcycle: Urban (+Tyres+Brakes+Abrasion))	0.013	

Mode of transport used and distance travelled for commuting in your region

	Commuting Modal % Split	Commuting Distance (km)
	Noord Holland	Noord Holland
Car	42	24.4
Motorcycle	8	17.6
Bicycle	31	4.7
Bus	3	13.8
National train	6	36.1
Tram/lightrail/metro	3	13.8
Walk	6	2.2
Other (average commuting distance)	0	16.1
TOTAL %	**100**	

Working days = 261 (weekdays) - Holiday entitlement =	233