



EMD UK Member Guidance:

Indoor Cycling Studio Space &
Safety Standards



As the National Governing Body (NGB) for group exercise, funded by Sport England, EMD UK is here to help you create spaces that are both commercially successful and completely safe.

This guide brings together the physical, environmental, and spatial layouts needed for indoor cycling in the UK. Setting your studio up this way ensures you meet the curriculum standards for Awarding Organisations (like Active IQ and YMCA Awards), align with CIMSPA Professional Standards, and keep your public liability insurance fully valid. From a health and safety perspective, following these benchmarks helps you stay comfortably compliant with standard UK regulations like PUWER (1998) and the Management of Health and Safety at Work Regulations (1999).

Making Space Work for Your Business

We know that applying rigid, blanket rules to high-volume commercial spaces doesn't work. This framework is designed to bridge essential safety with the real-world financial needs of commercial gyms, boutique studios, and premium performance facilities. Our goal is to give you and your instructors clear, practical layouts that protect your riders without hurting your floor capacity or your bottom line.

2. Managing Your Studio Space: The Floor Layout

When you are planning or auditing your indoor cycling studio, the two most important factors to keep in mind are your **Mechanical Clear Zones** (the physical space around the bikes) and your **Environmental Volume** (the air quality in the room).



The 0.5-Metre Perimeter Rule

As a baseline standard, every indoor cycling bike needs a clear, unobstructed zone of at least **0.5m** extending out from the edges of the flywheels, handlebars, and base stabilisers. This gives your riders and team three essential safety buffers:

- **Getting On and Off Safely:** It ensures participants have enough space to safely mount or dismount the bike from either side without bumping into adjacent equipment.
- **Room to Coach:** It leaves clear, open pathways for your instructors to move safely between rows, allowing them to give form corrections, offer coaching, or provide quick first-aid help if needed.
- **A Natural Motion Buffer:** High-intensity cycling involves a lot of movement. This space absorbs natural body sway during heavy out-of-the-saddle climbs or fast rhythmic transitions, preventing handlebars from clipping or riders from colliding.



Practical Layout Adjustments for Busy Studios

To help you maximise floor density without compromising on safety, you can apply the 0.5-metre rule flexibly depending on the direction the bikes face:

- **Side-to-Side (Lateral Overlay):** You can overlap the 0.5m boundary zones of side-by-side bikes. This leaves a fixed, comfortable clearance of 0.6m to 0.75m between the physical bike frames, which keeps enough room for side-mounting and coaching access.
- **Front-to-Back (Axial Strictness):** We don't recommend overlapping boundaries from front to back. Because indoor cycling bikes use fixed-gear flywheels, riders need a clear space of 0.75m to 0.9m from the back of one bike to the handlebars of the one behind it for safe emergency stops. Using a staggered layout can give you a bit more flexibility here.
- **Keeping Paths Clear:** Personal belongings, extra weights, and fitness accessories should never block the spaces between the bikes. Instructors should do a quick check to ensure walkways are clear before the music starts.

Floor Space & Studio Typologies

Finding the right balance between a high-energy atmosphere and safety compliance comes down to your studio type. To help with your floor planning, here is how standard **Gross Studio Area** (which includes the stage, storage, and pillars) translates into actual **Net Usable Riding Grid** targets:

Studio Style	Gross Space Guideline	Net Usable Space Target	Best Layout Option	Best Layout Option
High-Density Boutique	2.0 – 2.5 m ² per bike	1.4 – 1.5 m ² per bike	Zigzag / Staggered Rows: Handlebars align diagonally with the shoulders of the riders in front.	Great for creating an intense, high-energy class atmosphere. Requires strict attention to diagonal clearance and a powerful HVAC system to manage heavy sweat and heat.
Standard Commercial	3.0 – 3.5 m ² per bike	1.6 – 1.7 m ² per bike	Parallel Linear Grid: Straight rows divided by clear 1-metre instructor transit lanes.	The reliable baseline for multi-purpose studios. Makes floor cleaning, bike maintenance, and emergency exit paths incredibly straightforward.
Performance Tracking	4.0+ m ² per bike	1.8 – 1.9 m ² per bike	Tiered / Wide Arcs: Spaced widely to give every rider an uninterrupted view of the screen.	Perfect for data-driven studios (like Stages Flight or Les Mills The Trip) that use larger bike frames or individual rider fans.

A Quick Note on Capacity: Applying a strict, blanket 3.0 m² net rule across a commercial space can accidentally cut your class capacity in half. This makes studio spaces financially unviable without actually offering any extra safety benefits to the rider.



The Instructor Zone

One of the most common oversights in studio design is crowding the front row right up against the instructor's stage. To give your team a clear view of the whole room and ensure safety compliance, the instructor's bike should sit at least 1.5 to 2.0 metres away from the nearest participant bike. This ensures the instructor can spot technique issues easily and keeps the path to the main fire exit completely clear.

3. Air Quality, Ventilation & Sound Safety

The high-intensity nature of indoor cycling means your studio's climate and acoustics need proactive management to keep the environment safe and comfortable for everyone.

Airflow and Ventilation

- **Fresh Air Circulation:** To prevent heavy, stuffy air and heat exhaustion, your mechanical ventilation should supply at least **20 litres of fresh air per second, per person** based on a full class.
- **Air Changes:** Your HVAC system should target **20 to 30 air changes per hour** to keep heavy sweat condensation, high humidity, and sudden temperature spikes under control.
- **Carbon Dioxide Levels:** Keep an eye on your studio's air quality sensors—\$CO_2\$ levels should ideally remain below **1,000 ppm** during a standard hour-long session.



Sound Levels and Hearing Safety

To protect your instructors' hearing over long teaching schedules and stay aligned with noise-at-work guidelines, think about these setup tips:

- **Volume Limits:** Consider fitting your audio racks with a hardware decibel limiter capped at **94 dB(A)**. This protects team members who teach back-to-back classes.
- **Speaker Directions:** Position your inward-facing perimeter speakers so they project sound past the instructor's main stage position, rather than blasting directly at them.
- **Vibration Control:** Using rubber anti-vibration hangers for wall speakers and placing subwoofers on **50 mm high-density isolation pads** cuts down on low-frequency bass vibrating through structural walls into neighboring businesses.

3. Key Building & Accessibility Guidelines

To ensure your studio layout flies through standard building control and risk assessments, keep these straightforward access codes in mind during your design process:

Fire Routes and Clear Paths

Your bike layout should always feed naturally into open walkways leading to the fire exits:

- **Walkway Widths:** Main paths leading to emergency exits should be at least 750 mm wide for studios holding up to 60 people, and 1,050 mm wide for larger rooms.
- **Exit Distance:** Aim to keep every bike within 18 metres of a fire exit in a single-exit room, or within 45 metres if the studio has multiple exit doors.
- **Door Clearances:** Make sure no bikes or equipment block the swinging path of emergency doors. Instructors should do a quick visual check of these doors before launching a class.

Inclusive and Accessible Design

Designing your studio with adaptive athletes and inclusive access in mind makes your space welcoming to everyone:

- **Wheelchair Access:** Main corridors around the primary block of bikes should maintain a clear, comfortable width of 1,200 mm.
- **Accessible Transfer Stations:** We recommend setting aside at least one bike station with a level, clear floor space of 1,400 mm x 900 mm right next to the bike frame. This allows adaptive riders to make independent wheelchair-to-saddle transfers smoothly.

