

Client: Diageo

Sector: Distilling, rectifying and blending of spirits

Location: Glasgow

# The Brief

Diageo, a world-renowned leader in premium drinks, approached Elite Systems with the requirement for a high-specification sensory laboratory to enhance its product development and quality control processes. The facility needed to support accurate and repeatable sensory analysis, enabling expert tasters to evaluate aromas, flavours, and textures in a highly controlled environment.

The building had to be installed within Diageo's operational facility in Glasgow, beneath a fixed canopy, and seamlessly connect to the existing structure. Diageo expected minimal disruption to their ongoing production processes and required the facility to be delivered to strict internal timelines. In addition to meeting rigorous hygiene, safety, and environmental control standards, the design had to maintain architectural cohesion with the site's existing visual identity.

**Project:** Sensory Lab

Location: Glasgow

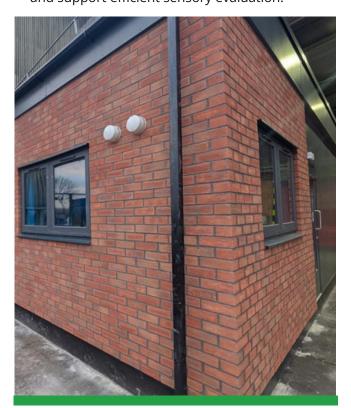
Timeline: The entire on-site assembly and finishing process was completed in just 10 weeks, showcasing the speed of modular construction. This efficiency is a direct result of manufacturing the building's components off-site, which allows for simultaneous work and a faster final build.

**Key Features:** Brickslip and plastisol finish, offering the classic look of brick. A unique installation under a canopy and a specialised roof-level drainage system to ensure efficient water management.

# The Main Features

## Inside

- **Precision-Engineered Sensory Booths-**Each booth was purpose-built with 2000mm fullheight laminated partitions, integrated service hatches from the preparation area, and individual dimmable lighting, creating a highly controlled environment for accurate and repeatable sensory analysis.
- Hygienic, High-Performance Interiors-All internal walls were finished with foil-backed hygienic cladding and vinyl-faced plasterboard, while Tarkett Safetred Universal flooring provided a durable, slip-resistant surface, ensuring the facility met Diageo's strict cleanliness and performance standards.
- **Accessible and Compliant Throughout-**The facility incorporates Part M-compliant ash veneer doors with glazed vision panels, generous circulation space, and ergonomic design elements, ensuring full accessibility without compromising on functionality or aesthetics.
- **Optimised Workflow Design-**From the dedicated sample preparation area with integrated storage and a utility sink, to the direct access hatch system and adjacent meeting room for debriefs, the internal layout was strategically designed to streamline operations and support efficient sensory evaluation.



## Outside

- Seamless Integration with Existing Building-The modular structure was directly connected to the existing facility, ensuring full accessibility and maintaining uninterrupted operational workflows. Ceiling heights and access points were precisely aligned to uphold architectural consistency.
- **Aesthetic Cohesion-**A carefully selected combination of Plastisol cladding and Brick Slip provided a sleek, durable finish that complemented the existing Diageo building, enhancing the site's overall visual appeal.
- **Specialised Drainage Solution-**Due to the absence of foul drainage at ground level, an innovative roof-level system was installed, incorporating a dedicated pump to manage wastewater effectively, highlighting the adaptability of the modular design to complex site conditions.
- **Unique Installation Method-**Positioned beneath an existing canopy, the building required a non-standard installation technique. Modules were offloaded, securely bolted, and skated into place with precision, minimising disruption to ongoing site activities.





# Challenges

The project presented numerous challenges, which we addressed with determination and creativity. Some of the key obstacles included:



#### **Site Constraints**

The project was delivered within Diageo's active production facility, meaning the build had to be carefully planned to avoid disrupting day-to-day operations. Site access was limited, with tight boundaries and ongoing staff movement nearby. Elite's pre-engineered modular approach enabled much of the construction to take place off-site, reducing vehicle movements, noise, and safety risks. On-site works were carefully phased and executed within a compact footprint, ensuring minimal impact on Diageo's operational continuity.



### **Canopy Constraints**

The site's fixed canopy structure severely limited vertical access, ruling out conventional craning methods for module placement. To overcome this, Elite developed a bespoke "skating" installation strategy, modules were offloaded, pre-connected at ground level, and gradually skated into their final position using precisionguided movement. This solution required extensive logistical coordination and highlighted the adaptability of the modular approach in constrained environments.



### **Innovative Drainage Solutions**

With no access to ground-level foul drainage infrastructure, the project demanded a nonstandard drainage solution. A custom roof-level system was designed, featuring a dedicated pump capable of managing wastewater efficiently from the testing and preparation areas. This approach ensured full compliance with hygiene and environmental regulations, while allowing the facility to operate independently of traditional site drainage networks.



#### Fast Turnaround

Diageo required the facility to be operational within a short timeframe to align with internal project schedules. To meet this, the modules were manufactured, fitted out, and quality-checked offsite while groundworks were simultaneously completed on-site. This dual-track approach significantly compressed the construction timeline, enabling installation and commissioning to be completed ahead of schedule with zero compromise on quality or compliance.



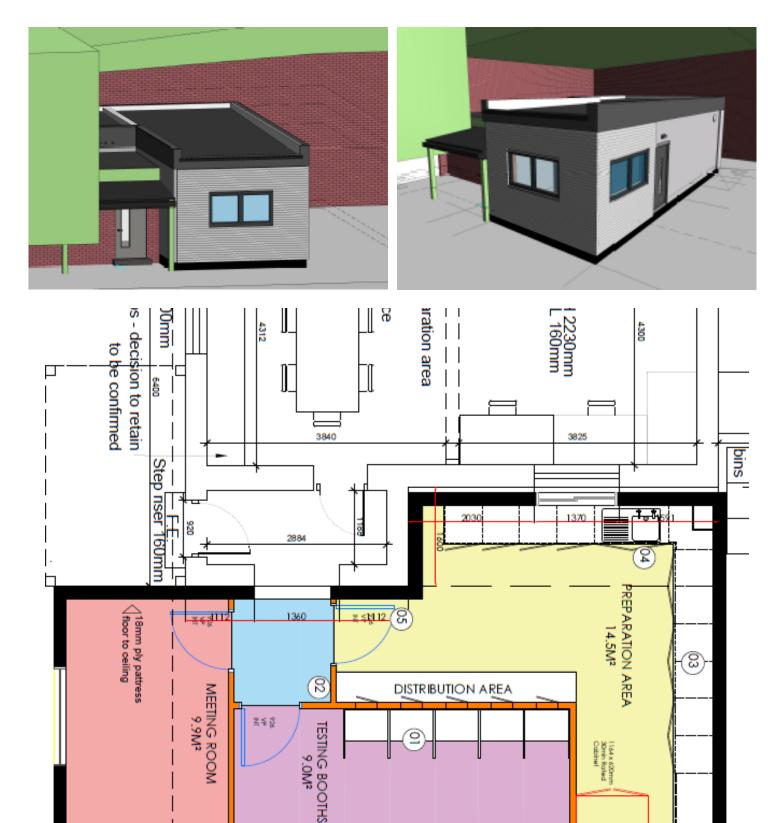
### **Precise Alignment**

Creating a physical link between the new modular facility and Diageo's existing structure required exacting precision. Key alignment factors, such as floor levels, ceiling heights, and door openings, had to match perfectly to ensure both functional flow and compliance with accessibility standards. This was achieved through coordinated digital design, rigorous quality checks, and precise on-site execution.



## **HVAC Zoning**

The integrity of sensory testing relies on strict environmental control. This facility required highly specialised HVAC zoning to prevent odour transfer, temperature fluctuations, and airflow crosscontamination between the preparation area, booths, and meeting room. Delivering this level of control within a compact modular layout presented a significant challenge, solved through bespoke ducting, system separation, and close collaboration with environmental engineers.



# Built Around the Brief

Elite's in-house design team worked closely with Diageo to develop a bespoke modular solution tailored to the demands of sensory testing. Detailed layouts and elevations were created to maximise functionality, ensure compliance, and integrate seamlessly with the existing site, even accounting for the unique challenge of installing beneath a canopy.

Each module was factory-built to exacting standards and delivered fully fitted, allowing for rapid on-site installation with minimal disruption to Diageo's operations.



# Facilitating Flavour, Built for Brand Excellence

The completed sensory lab has delivered lasting value to Diageo beyond its core functional purpose. The tailored internal layout has **enhanced workflow efficiency**, allowing teams to **move seamlessly between preparation, testing, and review**. The modular design also futureproofs the facility, offering flexibility for potential reconfiguration or expansion as operational needs evolve.

Staff feedback has highlighted the space's improved **comfort**, **accessibility**, **and intuitive design**, contributing to higher day-to-day satisfaction. Visually, the high-spec finishes and architectural consistency have elevated the overall site aesthetic, aligning with Diageo's premium brand image. Additionally, the off-site construction approach significantly **reduced on-site disruption** and embodied carbon, aligning with Diageo's broader sustainability targets.

#### **Key Outcomes:**

- Purpose-designed layout supporting efficient sensory workflows
- Adaptable modular structure with long-term flexibility
- Improved user experience through accessible, comfortable design
- **Premium aesthetic** aligned with Diageo's brand standards
- Reduced environmental impact through off-site construction

