



Free State Speedshop – Amsterdam

Architect: Ruben Wennekers

Glass rooflights for commercial buildings are being specified more frequently, as architects are tasked with creating work spaces that are more engaging and that maximise productivity. Improving natural daylight within a building is a widely accepted way of fulfilling this brief. So, when Amsterdam based custom car tuners 'Free State Speedshop' approached architect Ruben Wennekers to design their new workshop premises, an important aspect of the brief was to maximise natural daylight.

Free State Speedshop specialise in importing classic American muscle cars and restoring/race tuning them for dedicated car enthusiasts throughout the Netherlands. Although the building would primarily serve as a dedicated workshop space, it was also intended to act as a shop window for their finished projects, a place where customers could check up on progress over a coffee and hatch new ideas.

Architect, Ruben Wennekers was commissioned to deliver a simple contemporary structure with sharp, clean finishes that would juxtapose the swooping lines and chrome of the collection of American muscle housed within. Wennekers experience with modern barn style structures and his confident use of commercial glazing, successfully delivered a scheme that capitalises on tried and trusted commercial building practices, and mixes them with custom designed glass rooflights, adding a touch of glamour and interest to the building. building was Concorde BGW. Taking inspiration from the farm has led to the beautiful and well thought out design.

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The basic steel frame was fabricated off site, ready to be delivered and assembled as a kit. Before this, 18-metre-long timber piles were driven into the ground below the water table, topped with 3-metre-long structural concrete extensions. This is a common building method in the Netherlands and an estimated 200,000 timber piles are used annually for anything from agricultural and light industrial buildings to houses and roads. The timber is not susceptible to rot as it is permanently wet.

The concrete extensions support a structural steel frame which included custom fit framework designed to house two bespoke eaves Flushglaze rooflights, designed and manufactured by Glazing Vision in the UK and installed by their specialist distributors in the Netherlands, Glazing Vision Europe.



The rooflights comprise of a 2.6 metre vertical double-glazed unit, which then continues at a pitch of 18.4 degrees uninterrupted along the span of the roof for a further 4 metres. The Flushglaze units are designed to be installed completely in plane with the roof fabric, resulting in an almost frameless finish, both inside and out.

Due to the large expanse of glass, thermally efficient 30mm double glazed units were specified, comprising of 8mm heat soak tested toughened outer, 14mm argon filled cavity with warm edge spacer bar and a low emissivity 8mm heat soak tested toughened inner.

The original concept featured a more complex arrangement which was designed to run up to the ridgeline of the roof and down the opposing return. This idea evolved early in the development to meet budget constraints, Wennekers collaborated with the specification team at Glazing Vision Europe and specified their Pitchglaze roof window on the opposing return instead.

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This fulfilled the brief and complimented the two feature rooflights, with the same low-profile finish and frameless internal views. The extra amount of natural daylight that this creates was essential to the Free State team, as they often work with older paint finishes on the vehicles which can be difficult to interpret correctly in artificial light.

Free State Speedshop have already completed several projects including a Corvette ZR1 Centennial Edition, a 1971 Buick Riviera Boattail restoration and a Corvette C3 with high performance engine. Their latest project is the complete restoration and custom tune of a classic 1965 Corvette Stingray, complete with a Chevrolet 572 big block performance engine, 'there's no replacement for displacement' they told us.

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