

# Architectural Performance Specifications for ACSA Valet Operators Phase 1 – First Floor Offices, P1 Building

## General specifications

- Where a different system/material/component is suggested than as specified in this tender documentation, proof should be provided that the alternative system/material/component has an **equal or higher performance** than specified in this document and other relevant specifications and drawings in the tender documentation.
- Samples of all systems/materials/components to be provided prior to ordering.
- **All to be read in conjunction with specifications documents and drawings prepared by relevant consultant engineers.**

## Detail specifications

Component	Minimum performance specification
Floors	<ul style="list-style-type: none"> <li>- Dry slip rating: R11.</li> <li>- Wet slip rating: B.</li> <li>- Hard-wearing, suitable for high-traffic commercial use.</li> </ul>
Walls	<ul style="list-style-type: none"> <li>- 30 min fire rating.</li> <li>- Non-combustible.</li> <li>- Sound insulation rating of 41 dB</li> </ul>
Windows – Glass	<ul style="list-style-type: none"> <li>- Natural clear laminated safety glazing as per SANS 10400 Part-N.</li> </ul>
Windows – Frames	<ul style="list-style-type: none"> <li>- Specialist to be registered with AAAMSA if using aluminium.</li> <li>- Provide performance test certificate.</li> <li>- 5-year guarantee on installation.</li> <li>- Comply with AAMSA performance criteria A2.</li> </ul>
Doors – Glass	<ul style="list-style-type: none"> <li>- Natural clear laminated safety glazing as per SANS 10400 Part-N.</li> </ul>
Doors – Frames	<ul style="list-style-type: none"> <li>- Specialist to be registered with AAAMSA if using aluminium.</li> <li>- Provide performance test certificate.</li> <li>- 5-year guarantee on installation.</li> </ul>
Doors – Solid	<ul style="list-style-type: none"> <li>- Solid, secure door.</li> <li>- Non-combustible.</li> </ul>
Doors – Ironmongery	<ul style="list-style-type: none"> <li>- Manufacturer's guarantee.</li> <li>- Comply with BS EN 1527 standard.</li> </ul>
Ceilings and bulkheads	<ul style="list-style-type: none"> <li>- Non-combustible.</li> </ul>

Countertops	<ul style="list-style-type: none"> <li>- Hygienic.</li> <li>- Easily cleanable.</li> <li>- Water resistant.</li> <li>- Hard-wearing.</li> </ul>
Cupboards	<ul style="list-style-type: none"> <li>- Hygienic.</li> <li>- Easily cleanable.</li> <li>- Water resistant.</li> <li>- Hard-wearing.</li> </ul>
Paint	<ul style="list-style-type: none"> <li>- Easily cleanable.</li> <li>- Hard-wearing.</li> <li>- 7-year guarantee.</li> </ul>
Fire installation	<p>Standards to comply with:</p> <ul style="list-style-type: none"> <li>- SANS 10400 Part-T (design);</li> <li>- SANS 10139 (design; fire detection and alarm system);</li> <li>- SANS 1186-5 (marking and signposting).</li> </ul> <p><b>To be read in conjunction with the separate fire specifications document and drawings prepared by CA du Toit Consulting Engineers</b></p>
Signage	<ul style="list-style-type: none"> <li>- To comply with ACSA Standards and Specifications.</li> <li>- Design, materials, finishes and fixing to match existing.</li> </ul>

### Structural specifications

(note that these are only highlighted items that are listed here due to the high risks that these carry; these should to be read in conjunction with the separate structural specifications document and drawings prepared by Element Consulting Engineers)

Core drilling	<ul style="list-style-type: none"> <li>- Core drilling through post-tensioned concrete slab to be done strictly according to structural engineer's specifications.</li> </ul>
Loading of existing concrete floor slab	<ul style="list-style-type: none"> <li>- Overloading of the existing slab during construction must be monitored by the contractor.</li> <li>- No construction-imposed loading exceeding 200 kg/m<sup>2</sup> may be added to any part of a suspended slab without notifying the Structural Engineer 48 hours in advance, where after the need for temporary propping of the suspended slab will be determined.</li> <li>- No vehicles over 2500 kg may be allowed on any suspended slabs without propping of the slab(s) down to the ground floor level and only with written approval from the Structural Engineer.</li> </ul>

### **Mechanical specifications**

**(note that these are only highlighted items that are listed here due their importance; these should to be read in conjunction with the separate mechanical specifications document and drawings prepared by Element Consulting Engineers)**

HVAC / Mechanical Systems	<ul style="list-style-type: none"><li>- Designed and installed according to the specification stipulated by SANS 10400 Part-O regulations and good practice as followed by the American Society of Heating and Air-conditioning Engineers (ASHRAE).</li><li>- All offices and client areas will receive air-conditioning with relevant fresh air as per regulatory requirements.</li><li>- The air-conditioning will be provided using mid-wall type split units to the various rooms, with the condenser units either in a dedicated shaft or plant area as shown in the drawings.</li><li>- Airflow rate (l/s) and pressure (Pa) as per mechanical engineer's drawings.</li></ul>
Environmental Conditions:	Summer: 35.0°C db 23.0°C wb Winter: 4°C db 4°C wb
Indoor Conditions:	Summer: 22°C DB (±1.5°C) 50% RH Winter: 20°C DB (±1.5°C) 50% RH

### **Electrical and electronic specifications**

**(note that these are only highlighted items that are listed here due their importance; these should to be read in conjunction with the separate electrical and electronic specifications document and drawings prepared by Element Consulting Engineers)**

General	<ul style="list-style-type: none"><li>- Electrical and electronic installation to comply in full to the latest SANS 10142 standards and specifications.</li><li>- Electronic installation to allow for future installation by tenants.</li></ul>
Light fittings	<ul style="list-style-type: none"><li>- All to be supplied with energy efficient lamps (LEDs).</li></ul>

## Construction standards

- SANS 10155:2009 Accuracy in buildings
- SANS 10400: The application of nation building regulations – All parts
- SANS 2001-BE1:2008 Construction standards: Earthworks (general)
- SANS 2001-CS1:2012 Construction works: Structural steelwork
- SANS 2001-CC1:2012 Part CC1: Concrete works (structural)
- SANS 2001-CC2:2007 Part CC2: Concrete works (minor)
- SANS 2001-CM1: construction of brickwork & blockwork
- SANS 2001-CM2:2011 Strip footings, pad footings and slab-on-the-ground foundations for masonry walling
- SANS 10161:1980 The design of foundations for buildings
- SANS 10100-2:2014 The structural use of concrete Part 2: Materials and execution of work
- SABS 1200 HC (1988): Corrosion protection of structural steelwork
- SANS 50197-1: Cement
- SANS 10082: Reinforcing
- SANS 10240: Welded mesh fabric to comply with
- SANS 227: Burnt clay masonry units
- SANS 11077 (2009): Sealing compounds for the building and construction industry, two component, polyurethane-base
- SABS 1200 F: Piling
- SANS 10167 and 1044: Welding
- SANS 121 (ISO 1461): Hot dip galvanizing coatings on fabricated iron and steel articles