# CTICC







#### **ACCESS TO HEIGHTS**

Height access equipment is available for hire from the CTICC. Only qualified and licensed Mobile Elevated Working Platform (MEWP) operators may drive and operate access equipment within the CTICC premises.

#### **CABLING**

The CTICC provides and manages various types of cabling throughout the centre. The cabling sub-system connects every point in the building via a distributed patch cabling system. With the necessary equipment in place, a presentation or video clip shown in one of the breakout rooms can be routed, patched and projected in other venues. In some venues, the permanent cabling systems include microphone cabling. The audio-visual racks are linked via various tie lines back to a central patch to form a star cabling configuration. Any device connected to a floor outlet can be patched through and connected to any other device connected to another floor outlet in the CTICC by making use of VLANs.

The following types of cabling are available:

#### Fixed Speaker Cabling

The fixed speaker cabling is run in wire ways, trunking and conduits. The speaker cables are not shielded but are kept separate from the microphone and line level cables. The cable used for the fixed speaker cabling is 2-core 4mm2 black cabtyre. The speaker cables are then terminated into a female 4-pin Neutrik connector (the same connector in the field and the rack). Event Organisers providing their own patch leads are advised that both the 2-pin and 4-pin connectors will fit into the female 4-pin connector in the various floor and wall audiovisual boxes.

#### Microphone Cabling

The microphone cabling is run in wire ways, trunking and conduits and is single pair shielded cable. The microphone cables are run point-to-point (i.e. one floor outlet = one rack outlet). These cables are terminated with a female Amphenol XL3 connector (the same connector in the field and in the rack).

#### Control Cabling

The control cabling is run in wire ways, trunking and conduits and is single pair shielded Kelsey cable. The control cables are referred to as Line Level Send (LLS) and Line Level Return (LLR). The same cable is used for both services. The control cable runs point-to-point (i.e. one floor outlet = one rack outlet). These cables are terminated with a female Amphenol XL3 connector (the same connector in the field and in the rack). The LLR points are terminated with a male Amphenol XL3 connector (the same connector in the field and in the rack).

#### Ethernet Cabling (CAT5E and CAT6)

The building is flood-wired with CAT5e and CAT6 cable. These cables typically are terminated in a RJ45 connection jack and are compliant with TIA/EIA-568-B and ISO/IEC 11801 standards. The Ethernet cabling infrastructure was installed to be used for various different applications, which include patching into the centre's Gigabit data network, running voice, video or telecommunications in a star and/or point-to-point configuration.

#### FIBRE OPTICS

The centre is equipped with a grid of multi-mode fibre-optic cable running at 10Gbps. Typically, it is terminated with SC connectors at CTICC 1 and LC connectors in CTICC 2. Other termination methods are available on request. The fibre cables form the backbone of the data network and are also available for applications such as voice and video.



#### **CAT LADDERS & ELEVATED WALKWAYS**

Cat ladders and elevated walkways are installed in the Ballroom and Auditorium 1. Access is from the roof and is restricted to production personnel under the guidance of the staff from the CTICC's Facilities and Operations Department. These areas for general service require special permission for entry.

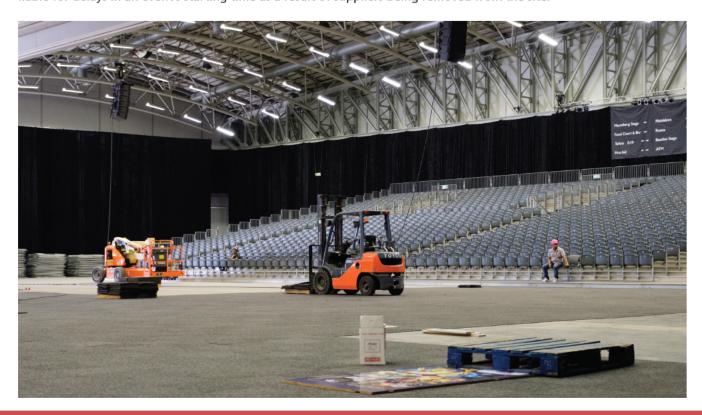
During the build-up and breakdown period, the event area is transformed into a construction site. Anyone working in the event area must comply with the requirements of the Construction Regulation 2014. Personal protective equipment (PPE) is the operator's responsibility. Should an operator not comply, work can be stopped until the contravention is corrected.

#### CHERRY PICKERS & SCISSOR LIFTS

In accordance with the Driven Machinery Regulation 2015, only trained and certified Mobile Elevating Work Platform (MEWP) operators will be allowed to operate equipment. Operators should carry their licences with them. Due care and attention must be given when operating equipment and moving among people or vehicles. No lifting equipment may be driven over carpets, and timber boards must be placed in the vehicle's path. The CTICC has procured boards for this purpose that can be signed out. The boards are available from the CTICC's Maintenance Department and will be checked after use. Any missing boards will be charged to the relevant company.

#### CONSTRUCTION

No cutting, drilling, painting, or any other kind of construction work will be allowed without proper use of drop sheets. Two workshop areas have been provided in the Marshalling Yard for this purpose. Suppliers found working without the necessary protection to cover carpets, will be removed from the venue and refused further access. The CTICC will not be liable for delays in an event's starting time as a result of suppliers being removed from the site.





### **DRAYAGE (TRANSPORT OF GOODS)**

Your Sales or Event Executive will provide further information in this regard.

#### **ELECTRICAL INFRASTRUCTURE & SERVICE**

#### Electrical Supply & Generators

- UPS power at CTICC 1 and 2 is used to drive all essential equipment and evacuation lighting during emergencies, approximately 100KVA.
- CTICC 1 has four 1MVA, one 400kVA, and one 250kVA generators. Two of the 1MVA generators starts up in sync and are connected to the buzz bar bulk supply system that interconnects substation 1 and 2 that feeds Halls 1 to 4, the Kitchens, Ballrooms, Meeting Rooms, The Roof Terrace, The Gallery and Office Blocks. These generators start up automatically when a power failure is detected and take the load in ± 40seconds. Two of the 1MVA generators are dedicated to the chiller, refrigeration and boiler plant rooms. These start up automatically when a power failure is detected and take the load in ± 40seconds.
- The 400kVA and 250kVA generators are dedicated to Auditorium 1. They start up automatically and take the general
  load in ± 40seconds. However, to engage the HVAC and bulk supply system in Auditorium 1, requires manual switching
  at substation 3.
- CTICC 1 has capacity for approximately 11 500 litres of diesel on-site and can run at load for approximately 10 hours continuously.
- CTICC 2 has two 1MVA generators that are connected to power Halls 5 to 10, the Kitchens, Meeting Pods, Meeting Rooms, The Roof Terraces, The Gallery, and Office Blocks. They start up automatically when a power failure is detected and take the load in ± 40seconds.
- CTICC 2 has capacity for approximately 14 000 litres of diesel on site and runs at load for approximately 24 hours continuously.

#### **Electricity Services**

The CTICC is equipped with several power systems. Electricity is reticulated at 240V and 380V. If your power requirements equal or exceed 32A 3-phase, please let your Event Executive know at least two weeks in advance of the event.

All main power installations, from source to outlet, may only be carried out by the CTICC's Maintenance Department staff or by the preferred CTICC electrical contractor. All installations must comply with the Electrical Installations Regulations. An Electrical Certificate of Compliance must be issued by a competent person.

Any electrical equipment brought into the CTICC must comply with South African Electrical Installation Regulations and SANS 10142. Non-complying equipment will immediately be removed from the premises at the expense of the exhibitor. Costs for damage caused by faulty equipment will be charged to the exhibitor.

The event organiser must ensure that no electrical equipment damages or interferes with the CTICC's electrical installation. Electrical services are only provided during the event and official build-up and breakdown hours.

Exhibition power available is 500 KVA per exhibition floor. On an optimum percentage utilisation (3m x 3m exhibition space) this provides approximately 250 exhibitors with 2kVA per stand (diversified). This can be plugged into points in these areas for large power consumers. The unit has a dedicated meter for costing purposes.

If generators are used, their location and accessibility for refuelling purposes must be pre-planned and generators must be appropriately earthed. Fuel storage and accessibility for fuel deliveries must be considered. The generator and its fuel must be fenced, and the necessary safety signage displayed to prevent access by anyone unauthorised.





There are supplies and areas in CTICC 1 and 2 that are not connected to the generators' supply. It is important to consult the CTICC's electrical technician to ensure your event is plugged into the electrical supply that is supported by our backup generation system.

If noise levels are excessive, management may request that silenced generators be used. Trailer-mounted generators must comply with national traffic codes and regulations. A Certificate of Compliance must be provided for the connection from the generator to its intended source. Fire extinguishers must be supplied with the generator.

#### Electrical Infrastructure for Exhibition Halls in CTICC 1 and 2

Each cluster house/pit box in CTICC 2:

- 2 x 16A 3-pin connection points (blue caravan-type plug). This is a single-phase socket outlet and needs to be converted to a normal 15A 3-pin socket via a distribution system
- 1 x 32A 5-pin connection point, or
- 1 x 63A 5-pin connection point
- 1 x data connection point.

Each trench in CTICC 1 and 2 consists of:

- 2 x 16A 3-pin connection points (blue caravan-type plug). This is a single-phase socket outlet and needs to be converted to a normal 15A 3-pin socket via a distribution system
- 1 x 32A 5-pin connection point, or
- 1 x 63A 5-pin connection point at each cluster
- 1 x data connection point.

Single-phase power is available throughout the building, and 3-phase power points are available from facility boxes within the Exhibition Halls at a cost. The dedicated use of electricity and services is charged to the event organiser. Your Event Executive will provide further information in this regard.

Halls 1, 2, 3 and 4 have two common 400A connection points, and each hall has two 125A connection points. All connection points are situated in P3 Parking. Within Exhibition Halls 5, 6, 7, 8, 9 and 10 is a 400A connection point facing the Marshalling Yard, and two 125A connection points on each side of the halls. In Exhibition Halls 1, 2, 3 and 4, the clusters are positioned 16m apart within the trenches. In Halls 5, 6 and 7, the clusters are positioned 5m apart within the trenches.

In Exhibition Halls 8, 9 and 10, pit boxes are positioned 5m apart throughout the halls. Stand builders placing floorboards on carpets, should cut out a trapdoor to ensure accessibility to the underfloor pits. Floorboards may not be modified.

- No twin flex is permitted.
- Wiring for all purpose-built stand shell schemes/equipment is to be done by registered wiremen only and must comply
  with the South African Bureau of Standards (SABS) and the Occupational Health and Safety Act. A Certificate of
  Compliance must be submitted to the CTICC's management before the start of the event.
- Only SABS-approved multi-socket/multi-extender plugs or cab-tyre may be used.
- Wiring systems must be insulated flexible cables with copper conductors, with a minimum cross-section area of 1.5mm². Appropriate circuit breakers must be included to protect the cable (1.5A to 15A maximum).
- Open wiring is allowed.
- No joints in trailing cables are allowed.
- Multiple wiring will not be permitted to terminate to a single 15A plug top (SA 3-pin round plug).
- Lighting is to be looped from fitting to fitting, with all terminations secured and concealed.



To order electrical connections, complete the Electrical Order Form, available from your Event Executive.



- · Should any termination points be required to wire ways, they need to be insulated and of a mechanical nature.
- Stands constructed of conductive materials must be double earthed to the CTICC's earthing system.
- To cater for most exhibition requirements, 5A are allocated per exhibition stand. Laser printers, heating and refrigeration equipment may require additional electrical supplies.
- Electronic transformers are to be used where possible.
- Each electrical point provided is intended for one item of equipment or machine on display. Multi-point socket outlets are not permitted.
- No electrical installation and/or fitting may be suspended from the ceiling of the Exhibition Hall or fixed to any part of the building structure without prior approval. If permitted, a fee will be levied.
- 30A and 60A 3-phase power, including earth and neutral, are available on request. Any power requirements of more than 60A should be discussed with the CTICC's management.
- Neon lighting may not be installed without written authorisation from CTICC's management.
- · If approved, a fireman's switch is to be installed.
- The CTICC reserves the right to specify higher quality installations than those prescribed in SANS 10142 or the Occupational Health and Safety Act (No 85 of 1993) and Electrical Installations Regulations 2009 and to request a Certificate of Conformity as directed by legislation.

#### **Electrical Power Consumption**

Power consumption exceeding R100 is for the event organiser's account. This will be charged at a cost of R1.35 per kWh in all venues where sub-metering is in place. Please consult your Sales or Event Executive for more information.

#### **ESCALATORS**

The CTICC has 17 escalators – nine in CTICC 1 and eight in CTICC 2. They are situated as follows:

#### CTICC 1

- · From P3 to the ground floor
- · From the ground floor to the first floor at the main foyer
- From the ground floor to the first floor at entrance 5
- · From the first floor to the second floor at the main foyer
- From the first floor to the second floor at entrance 5

#### CTICC 2

- · From the sky bridge to the ground floor at the main foyer
- From the ground floor to the first floor at the landing
- From the first-floor landing to the second floor

It is not recommended that the direction-flow of escalators is altered as this increases the risk of equipment failure.





#### **EVACUATION**

Evacuation procedures will be announced on a dedicated fire/evacuation PA system and will be co-ordinated by the CTICC's management. It is the duty of event organisers to familiarise themselves with the evacuation routes and ensure an evacuation plan has been documented and is available in the Client Safety File.

#### **EXHIBITION STORAGE**

There is no storage facility available onsite. The CTICC recommends drayage suppliers who can provide offsite storage. The CTICC will not be held liable for any items stored.

#### **FACILITY BOXES/TRENCHES**

Facility boxes or trenches are situated throughout the CTICC. Depending on the venue, they contain:

- Data cabling
- · Single and 3-phase electricity points
- · Sleeves for additional services and compressed air
- · Wet waste for any wastewater
- Fresh water
- Plumbing
- LPG gas lines

#### Exhibition Halls 5, 6 and 7:

- Trenches
- · Plumbing: There are two water points at opposite corners of each hall.

#### Exhibition Halls 8, 9 and 10:

- Facility boxes 63A, 32A 3-phase sockets are available in these boxes. Also note that the 16A single-phase sockets (blue
  caravan-type plug) are dedicated and need to be converted via distribution to a standard 3-pin 15A socket.
- Plumbing: There are two water points at opposite corners of each hall.

#### FIRE ESCAPES

Fire escapes are located throughout the venue and are demarcated with signage. Event organisers must ensure that neither the signage nor the exits are obstructed in any way.





#### FIRE SYSTEM & MITIGATION

In the event of an emergency, the following services will be provided:

- · Emergency lighting to required lux level
- Essential ventilation (smoke venting)
- An automatic fire detection system
- · Fixed and mobile firefighting equipment
- Aspiration system
- Evacuation PA system
- Sprinkler systems
- · Fully trained emergency co-ordinator and team
- Trained fire marshals
- Pressurisation of fire escape stairwells
- Kitchen Ansul system

The isolation of the fire detection system is not allowed. Should it be necessary to isolate the fire detection system in a certain area, a fire marshal must be appointed. The Conference Services Department can assist with booking a trained fire marshal. In case of fire, all lifts will home to the ground floor and escalators will stop operating.

In the case of any emergency, contact the Event Services Manager or call +27 21 410 5252 from an outside line, or extension 5252 from an internal line.

#### FLOOR-LOADING LIMITS

Maximum floor-loading capacities in the CTICC are:

- 1 500kg/m² in Exhibition Halls 1, 4A and 4B
- 3 000kg/m² in Exhibition Halls 2 and 3
- 500kg/m² in the Restaurants and Conservatories
- 2 000kg/m² in Exhibition Halls 5, 6 and 7
- 750kg/m² in Exhibition Halls 8, 9 and 10
- 500kg/m² in the foyers of the Ballroom and Auditorium 1

The event organiser must ensure that these weights are not exceeded. Notify your Sales or Event Executive of any equipment weighing more than 2 000kg.

#### **FORKLIFTS & OPERATORS**

The arrangement of forklifts is the event organiser's responsibility. All forklift drivers must conform to the Driven Machinery Regulations 2015. The event organiser and operator will be liable for any injuries or damage caused by reckless driving.

#### **HANGING BARS & POINTS (RIGGING)**

Hanging bars and points are available in the Ballroom, Auditoria and Exhibition Halls. All connections and work must be done by qualified riggers, and the necessary certificates must be issued for connections to ensure a safe load is applied.



#### LIFTS

#### **VIP Lift**

Lift car size (w x d x h)	1.4 m x 1.5 m x 2.6 m (2.1 m²)
Lift opening size (w x h)	1.2 m x 2.2 m
Maximum load	1 600 kg

#### Public Lifts

Lift car size (w x d x h)	1.6 m x 1.4 m x 2.6 m (2.24 m²)
Lift opening size (w x h)	1.2 m x 2.2 m
Maximum load	1 600 kg

#### Back-of-House Freight Lift

Lift car size (w x d x h)	1.5 m x 2.2 m x 3 m (3.6 m²)
Lift opening size (w x h)	1.2 m x 2.2 m
Maximum load	1 600 kg

#### Front-of-House Freight Lift

Lift car size (w x d x h)	1.4 m x 1.5 m x 2.6 m (2.1 m²)
Lift opening size (w x h)	1.2 m x 2.2 m
Maximum load	1 600 kg

## CTICC 2 Lifts (Public Lifts: Lifts 1 & 2)

Lift car size (w x d x h)	1.350 m x 2.1 m x 2.2 m
Lift opening size (w x h)	1.1 m x 2.1 m
Maximum load	1 275 kg

#### Public Lifts (Observation Lift, Lift 10)

Lift car size (w x d x h)	1.4 m x 2 m x 2.2 m
Lift opening size (w x h)	1.1 m x 2.1 m
Maximum load	1 275 kg

#### Back-of-House Freight Lifts (Lifts 3 & 4)

Lift car size (w x d x h)	1.4 m x 2.4 m x 2.5 m
Lift opening size (w x h)	1.1 m x 2.4 m
Maximum load	1 600 kg

#### Back-of-House Freight Lift (Lift 5)

Lift car size (w x d x h)	1.1 m x 2.1 m x 2.2 m
Lift opening size (w x h)	0.9 m x 2.1 m
Maximum load	1 000 kg

Vehicles utilising these lifts should be a medium-size delivery vehicle such as an MB Vito, Hyundai H1 or similar.

#### Vehicle and Goods Lifts (Lifts 6 & 7)

Lift car size (w x d x h)	2.9 m x 6.5 m x 2.6 m
Lift opening size (w x h)	2.7 m x 2.5 m
Maximum load	4 000 kg

#### Link Lifts (Lifts8 & 9)

Lift car size (w x d x h)	1.4 m x 2.4 m x 2.5 m
Lift opening size (w x h)	1.1 m x 2.4 m
Maximum load	1 600 kg

### Front-of-House Freight Lift (Lift 11)

Lift car size (w x d x h)	1.6 m x 2.1 m x 2.5 m
Lift opening size (w x h)	1.1 m x 2.4 m
Maximum load	1 600 kg

On event days, parking can be secured in the P1, P3 & P5 parking areas.

#### **PARKING**

(See Parking & Logistics Manual)



#### **SCAFFOLDING**

The use of scaffolding for draping purposes is not allowed. Should you erect scaffolding to aid build-up or strike, this must conform to Section 16 of the Construction Regulations. A copy of the inspector's appointment letter must be provided to the Safety Officer and fall protection and a rescue plan must be provided for working at heights. A structural engineering certificate may be required for complex scaffolding. Your Event Executive can provide further information in this regard.

#### **TOILETS**

Facilities include male and female toilet facilities for the disabled, and baby-changing facilities. All toilet facilities include a dual-flush system to promote water conservation. For special events, clients are responsible for sourcing and installing additional toilet facilities. The allocation of these facilities should be discussed with your Sales or Event Executive, as well as the CTICC's Operations Department.

#### CTICC 1

#### **Ground Floor**

Toilets are situated outside Exhibition Halls 1B, 2, 3 and 4 along the gallery area:

- · 32 toilets for females
- 12 toilets and 24 urinals for males
- Four toilets for the disabled Hall 4B is equipped with:
- · One toilet for the physically challenged

There are three toilets outside Exhibition Hall 2 (two for females and one for males), accessible from the Marshalling Yard for use during the build-up and breakdown period.

#### First Floor

- · 28 toilets for females
- 11 toilets and 37 urinals for males
- Four toilets for the disabled

#### Second Floor

- 11 toilets for females
- Six toilets and 18 urinals for males
- · Two toilets for the physically challenged





#### CTICC 2

#### **Ground Floor**

- · 32 toilets and 15 urinals for males
- 21 toilets for females
- Three toilets for the disabled

#### Level 1

- Six toilets and 15 urinals for males
- Nine toilets for females
- Two toilets for the disabled

#### Level 2

- 12 toilets and 15 urinals for males
- 21 toilets for females
- · Three toilets for the disabled

#### Level 2M

- Two toilets and two urinals for males
- 21 toilets for females
- One toilet for the disabled

#### Back-of-house

#### Toilets for service personnel

#### **Ground Floor**

One toilet for males

#### Level 2

· Two toilets for males

#### WATER

The CTICC's tap water is safe to drink and meets world health standards. The CTICC also has an installed Vivreau UV bottling system that ensures on-site bottles contain nothing but the best tasting water.

#### WATER & DRAINAGE

Water supply and drainage are available in the Exhibition Halls. The event organiser may order water and drainage through the CTICC's exclusively contracted supplier. Your sSales or Event Executive will provide further information in this regard.