



THE UNIVERSITY OF  
**NEWCASTLE**  
AUSTRALIA

**The University of Newcastle**  
Infrastructure and Facilities Services  
UON-BSS-001 Specification for  
Electric Sit-Stand Workstations

March 2019

*Version 1*

**DOCUMENT CONTROL:**

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1	March 2019	First issue	Tim Johnson	Richard Eyre (Electrical) Daan Schiebaan (Sustainability)	Meri Butler

## 1. GENERAL

### 1.1. Scope

General: This specification provides design guidance on sit-stand workstations for use in the University of Newcastle (UON).

### 1.2. Related work

Coordinate and cooperate with the following disciplines and services:

- Electrical
- Communications
- Other furniture trades and suppliers

### 1.3. References

General: Comply with all regulatory and legislative requirements and mandatory Australian Standards. Where requirements of this specification conflict with regulatory and legislative requirements and mandatory Australian Standards, comply with the latter and notify UON project contact.

Standards:

- AS/NZS 4443:1997 Office panel systems – Workstations
- AS/NZS 1859 suite of standards – Reconstituted wood based panels, for materials requirements and limits on hazardous substances, including formaldehyde and E<sub>0</sub> ratings.

University standards:

- UON Electrical Specification – UON-ESS-001 General Electrical Specification
- Space Management Allocation Guideline and Procedure

### 1.4. Submissions

#### Samples

Submit for approval samples of all finishes for the purpose of verifying and validating finishes, prior to ordering or fabricating products.

#### Drawings

Submit for approval drawings indicating layouts within rooms, including interfaces to electrical, communications and other building systems. General arrangement drawings are an acceptable format during design stages of a project. During construction, contractor or sub-contractor workshop drawings are to be submitted for approval; these drawings are to include dimensioned layout and set out information

### 1.5. Sustainability

The University is committed to ensuring social, ethical, environmental and economic responsibility is considered during the procurement process, including the purchase of furniture such as electric sit-stand workstations. The University is a significant purchaser of furniture and it is vital sustainability principles are instilled into our procurement activities.

The University will be integrating sustainability requirements into furniture specifications, and will endeavour to continue updating these requirements. This includes maximising the reuse of sit-stand workstations across the University.

Supplier take back/buy back services, which encourage collection, disassembly, re-use and/or recycling services, are preferred. A supplier response to take back/buy back services is required.

## **2. PRODUCTS AND COMPONENTS**

### **2.1. Materials generally and sustainability**

Timber: All timber and composite timber products used in the manufacture of office furniture products to be legally sourced and certified to Forest Stewardship Council (FSC1) standards or Programme for the Endorsement of Forest Certification (PEFC2) standards.

VOC limits: Reconstituted wood products, including plywood, MDF and particleboard are to be E<sub>0</sub>, or better performance, to the AS1859 suite of standards.

Recyclable materials: Maximise recyclable content and materials used. This includes product packaging. A clear label of what is recyclable at the products end of life is to be included.

Chrome finished materials: Do not use chrome finished products. An acceptable alternative is metallic powder coat finish.

### **2.2. Worktop**

Material: E<sub>0</sub> MDF panel finished top and bottom with high-pressure laminate and with 2.0 mm ABS edge.

Size: 1800 mm W x 750 mm D x 25 mm TH generally. Refer also to Space Management Allocation Guideline and Procedure.

Cut outs: Scalloped cut outs to rear edge of worktop with ABS edge to suit power and communications installation requirements.

Colours:

- Topside: Warm White
- Underside: Warm White or white.
- ABS edge: To match topside

### **2.3. Electrical adjust sit-stand frame**

Materials: Steel with white powdercoat finish. Frame supports worktop with no visible deflection or slump.

Electrical adjustment: Linear actuator to each leg, supplied from a single power supply mounted to underside of worktop. Each electric sit-stand workstations requires a dedicated power outlet for operation of electric adjustment.

Worktop mounted control panel: Panel includes four pre-set buttons, separate buttons for up and down adjustment and digital display.

Height of adjustment: From 600 mm to 1250 mm (measured from finished floor level to bottom of worktop)

Weight capacity:

- Evenly distributed load: 100 kg minimum. Note that this capacity includes the weight of the worktop.
- Point load: 30 kg minimum

Managing impact of workstation adjustment with fixed obstacles: Select from two options below.

- Option 1 – Fail safe stop with user instruction: Electric sit-stand frame safely stops and control panel displays error code. User instructions for resetting electric sit-stand frame provided on a sticker fixed to the underside of the worktop.
- Option 2 – Impact Stop system: Impact Stop initiates while frame is lowering or raising, when 1 second of resistance from an obstruction is detected. When resistance is detected, desk will automatically stop then move 50 mm in opposite direction in order to clear obstruction.

#### 2.4. Shelving

Shelf panel: 600 mm W x 300 mm D x 25 mm TH E<sub>0</sub> MDF shelf panel with laminate to both sides and matching ABS edge. Finishes generally match worktop.

Support legs: 2 x steel support legs, powdercoat finish, mounted to workstation worktop.

Dividers: Provide metal dividers to the shelf panel.

#### 2.5. Acoustic screens

Generally: 50 mm thick acoustic screen system with fabric facing. Segregated trunked ducting for comms and power cables may be included as part of power and data delivery system.

Frame: White powdercoated metal frame, rectangular profile.

Height: 1200 mm generally. Coordinate screen heights with window sill heights where screens abut, or are positioned close to, windows. Side and end screens extend to finished floor level. Rear screens, where supported by adjoining side and end screens, generally finish 300 mm above finished floor level.

#### 2.6. Power and data

Generally: Comply with current version of UON-ESS-101 General Electrical Specification.

Sort wiring components: Starter sockets, junction boxes, connector leads, and power modules to be Electric Cable Duct Systems (ECD) or similar square pin configuration. Clipsal style round pin sockets are not acceptable and are not to be used.

Number of workstations per starter socket circuit: 4 maximum.

Power module to desk top: Refer to UON-ESS-101 General Electrical Specification

Data: Needs to be in accordance with the UON IT standards please ensure you confirm the data requirements with the IT Project liaison

#### 2.7.

##### Power and data trunking

Pole trunking: 50 x 50 mm segregated trunking poles integrated into acoustic screen system, and extending from finished floor level to ceiling.

Umbilical: Flexible 50 x 50 mm segregated and segmented trunking route. Suspended from ceilings or rising from floors.

#### 2.8.

##### Cable basket

Segregated cable basket for power and data cabling, and for organisation of technology cabling. Fixed to underside of worktop. Cable baskets must be earthed or constructed of non-conductive material.

### 3. EXECUTION

#### 3.1. Setting out

Set out desks according to approved design and approved workshop drawings. Coordinate cable entry points with approved set out.

#### 3.2. Installation generally

Assemble workstation products and components so that assembly is tight, firm, level and square.

#### 3.3. Electrical installation

Each electric sit-stand workstations requires a dedicated power outlet for operation of electric adjustment.

##### **Screened workstation systems which include soft wiring.**

The workstation supplier supplies soft-wiring components and systems, including delivery to site at times that suit the project program.

The electrician installs soft-wiring starter sockets. Delivery of sockets is by the workstation supplier, noting that some installations will require sockets to be on site well in advance of delivery of workstations generally.

The workstation supplier installs soft wiring from starter socket to and within workstation and screen systems.

Workstations in an area that has central heating or cooling shall have no more than 4 workstations per circuit/ Soft wiring socket with 6 electrical outlets per workstation. Workstations within these areas shall also have an engraved label on the lower outlets stating **“Not to be used for heating or cooling appliances”**.

Workstations in an area that has no central heating or cooling shall have 2 workstations per circuit/ Soft wiring socket with 6 electrical outlets per workstation.

#### 3.4. Testing and commissioning

Prior to completion:

- Coordination of control panel height to actual height of top of desk (ie: 720 mm on digital display is the same as 720 mm above floor.)
- Test all soft-wiring systems.
- Tag and test of electrical cord for electrical adjust sit-stand frame.
- Cleaning of electric sit-stand workstations.
- User instruction stickers fixed to underside of worktop.
- Desk height adjusted to 720 mm above finished floor level, and Preset 1 set to this level.

#### 3.5. Rubbish removal

Remove and dispose of all rubbish and waste. Separate waste into land fill and recycled streams. Submit dockets indicating that waste has been recycled and/or land filled as appropriate.

#### 4. SUPPORTING IMAGES

Note: imagery is generic in nature and does not represent a specific manufacturer or supplier.







