

 IIT PALAKKAD	भारतीय प्रौद्योगिकी संस्थान पालक्काड Indian Institute of Technology Palakkad अहलिआ एकीकृत कैम्पस, कोज़िहपारा Ahalia Integrated Campus, Kozhipara पालक्काड- 678557 Palakkad – 678 557	दूरभाषसंख्या/ Phone no: 04923 – 226300/590/586 ईमेल/ Email : purchase@iitpkd.ac.in
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Ref No: IITPKD/ELE/AA/080 / 2017

Date: 01.12.2017

Due Date of the tender: 15.12.2017 @ 3.30 PM

TENDER FOR INVITING QUOTATIONS

Dear Sirs,

On Behalf of Indian Institute of Technology Palakkad quotations are invited for “Work Tables for the General Electronics Lab at Transit Campus, IIT Palakkad” confirming to the specification in the Annexure.

- 1. Preparation of Bids:** - The tenders should be submitted **under two-bid system** (i.e.) Technical bid and Financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. No prices should be included in technical bid. Financial Bid should indicate item – wise prices for the items mentioned in the technical bid. The technical and the Financial bids should be put in separate cover and sealed. Both sealed covers should be put into a bigger cover
- 2. The Quotations** duly sealed and superscribed on the envelope **with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above. Fax and Email quotation are not acceptable.**
- 3. The price** should be quoted per unit and packing and delivery charges should be indicated separately. The offer/bids should be exclusive of Taxes and Duties, which will be paid by the purchaser as applicable. However the percentage and of taxes and duties as on date should be clearly indicated.
- 4. The Quotations** should be valid for **sixty days** from the due date and the period of delivery required should also be clearly indicated.
- 5. Local Firms:** Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
- 6. Outside Palakkad:** Quotations should be for **F.O.R. at IIT Palakkad**. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.

7. Goods shall not be supplied without an official supply order.
8. **Custom Duty:** Custom Duty which will be paid at a concessional rate against duty exemption certificate.
9. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later. No advance payment will be made. The Tenderer have to furnish the bank details along with tender like Account No, Account Name, IFSC Code, Bank address etc.
10. **Submission of Bids:** Quotation should be sent to the following address “**The Registrar, Indian Institute of Technology Palakkad, Ahalia Integrated Campus, Kozhipara, Palakkad -678 557, Kerala**”, Phone No: **04923 226 586/590**, Email: purchase@iitpkd.ac.in.
11. **Delivery Period:** Within one month from the date of Purchase order.
12. **Delay in Supply or Liquidate damages:** If the supplier fails to deliver the stores within the time specified in the purchase order, the purchaser will recover from the supplier as liquidated damages a sum of one- half of one percent (0.5%) of the P.O value of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed five percent (5%) of the P.O price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.
13. **Late offer:** The quotation received after due date will not be considered. Please ensure that your offer is sent well in advance to reach the Institute by the due date.
14. **Warranty:** Warranty Clause should be indicated clearly.
15. **Acceptance and Rejection:** IIT Palakkad has the right to accept the whole or any parts of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

Yours faithfully,

Encl: Specifications

Registrar, IIT Palakkad

Technical Specifications for Work Tables

General Electronics Lab, Transit Campus, IIT Palakkad

I. Overview : An overview of our requirements is listed below. Detailed specifications are available in the subsequent sections of this document.

- a. **Workdesk Arrangement :** (See Item II and Figure 1)
A total of 42 workdesks have to be arranged as six islands as shown in the Layout. Each island will have a dedicated cable management system.
- b. **Type A workdesk :** 30 Numbers (See Item III and Figures 2, 3, 4)
 - i. C-frame construction based workdesks with granite top of size 1350 mm X 1000 mm.
 - ii. Each workdesk will have a built-in storage unit.
- c. **Type B workdesk :** 6 Numbers (See Item III and Figures 2, 3, 4)
 - i. C-frame construction based workdesks with granite top of size 1850 mm X 1000 mm.
 - ii. Each workdesk will have a storage unit on rollers.
- d. **Type C workdesk :** 6 Numbers (See Item III and Figures 2, 3, 4)
 - i. C-frame construction based workdesks with L-shaped granite top
 - ii. Each workdesk will have a storage unit on rollers
- e. **Electrical & Network :** (See Item IV and Figure 5)
 - i. Each workdesk will have 6 x 5/15A combi-socket plug points with dedicated switches. Each workdesk will have 1 LAN port.
 - ii. IIT Palakkad will provide a dedicated electrical distribution board below each island. The cable management system provided by the bidder must connect to this distribution board.
 - iii. Electrical wiring within the islands and to the distribution boards is under the scope of the bidder.
- f. **Warranty :** Warranty for a minimum period of one year must be quoted.
- g. **3D Diagram :** A 3D mockup of the proposed solution must be provided along with the technical bid.

II. Workdesk Arrangement

A layout of the workdesk arrangement is provided in Figure 1. Workdesks have been marked with a number and table type (for example 1C, which indicates a Type C Workdesk numbered #1).

III. Work desk Design

Sl. No.	Item	Remarks
1.	General Points	
a.	Table should have a C frame structure	
b.	C frame should not have a vertical front leg	
c.	Structure should have removable back panel for maintenance.	
d.	Should have skirting at the bottom of the back side (see Figure 2 for reference).	
e.	All sheetmetal components should be of CRCA confirming to IS code 513:1994	Make: TATA, Jindal or substantially equivalent.
f.	All metal parts should be treated with pure epoxy powder coated finish.	
g.	No rivets/screwheads must be visible from the outside.	
2.	Frame System	
a.	Height of C-frame	900 mm.
b.	C frame should be constructed from a rectangular pipe	Cross section : 60mm (or larger) x 30mm (or larger)
c.	Minimum thickness of rectangular pipe cross section	2mm
d.	C frame legs should have adjustable feet	-5mm to +20mm tolerance
3.	Horizontal Members	
a.	Horizontal member should be constructed from a rectangular cross section pipe	Cross section : 60mm (or larger) x 30mm (or larger)
b.	Minimum thickness of rectangular pipe cross section	2mm
4.	Worktop	
a.	Thick jet black granite worktop	19mm (+/- 2mm) thickness
b.	Edges of worktop	Chamfered and smoothed
c.	Bottom of worktop should be polished	

	d.	Worktop Shape	
	i.	Type A table	1350mm x 1000mm. See Figure 2, 3
	ii.	Type B table	1850mm x 1000mm See Figure 2, 3.
	iii.	Type C table	1850mm x 1000mm with a cut-out of size 650mm x 350mm to accommodate a pillar. See Figure 2, 3. Note that the cut-out will appear to the left of the tabletop for three C-workdesks and will appear to the right of the tabletop for three C-workdesks.
5.		Sheet Metal Panels	
	a.	Back panel, Skirting panel and any other panel (that might be used a fillers) must be made from CRCA sheetmetal confirming to IS code 513:1994	
	b.	Minimum thickness of CRCA sheet-metal	1.0mm thickness
	c.	<i>Special requirement for Back Panels</i>	
	i.	These should be easily removable (unclipped)	
	ii.	Should cover a service cabinet running behind	
6.		Storage Unit	
	a.	For Type A tables	See Figure 4
	i.	Must be fastened to the workbench	
	ii.	Must have 1 Drawer and 1 cabinet. The cabinet must include one horizontal shelf.	
	iii.	Width of storage unit	450 mm
	iv.	Depth of storage unit	Choose depth such that the storage unit occupies the full space from the front of the workdesk to the backpanel.
	v.	Height of Drawer	150mm – 200 mm
	vi.	Height of the Storage Cabinet	400mm – 500 mm
	vii.	Must be made from CRCA sheetmetal confirming to IS code 513:1994.	At least 1.0mm thickness
	b.	For Type B and Type C tables	See Figure 4
	i.	Must be on wheels. Wheels must be lockable.	

	ii.	Must have 1 Drawer and 1 cabinet. The cabinet must include one horizontal shelf in the middle.	
	iii.	Width of storage unit	600 mm
	iv.	Depth of storage unit	Choose depth such that the storage unit occupies the full space from the front of the workdesk to the backpanel.
	v.	Height of Drawer	150mm – 200 mm
	vi.	Height of the Storage Cabinet	400mm – 500 mm
	Vii.	Must be made from CRCA sheetmetal confirming to IS code 513:1994.	At least 1.0mm thickness

IV. Electrical & Network

1.	Workdesk Cable Management System		
a.	Must be made from CRCA sheetmetal confirming to IS code 513:1994.		1.0mm thickness or thicker
b.	The front surface that houses the electrical points should have a slope. (see Figure 2)		
c.	Must have cut-outs to house 6 x 5/15 plugpoints (each with dedicated switch) and 1 LAN port per workdesk.		
d.	Approved Make for Switches and Plugpoints and LAN ports		Legrand, Northwest, MK
2.	Wiring details (Refer Figure 5. Note that the letter marked on a workdesk refers to the power phase to be used.)		
a.	Maximum Power Consumption per workbench		At least 750 W
b.	IITPkd will provide a Distribution Board (DB) for each island as shown in the Layout (Figure 1.) This DB will have one dedicated MCB per circuit. Each workbench will constitute one circuit.		
c.	Colour of phase wire used must correspond to the phase marked in the wiring diagram. Green will be used for Earth.		
d.	Rating of All wires for connection from DB to workbench and for looping connections within workbenches		At least 4 sq mm, FRLSH
e.	Looping connections must make use of connectors in order to accommodate 4 sqmm wires comfortably.		
f.	All terminations of all cables shall be done with suitably sized copper legs.		

	g.	Approved make of electrical wires	Finolex, Vgaurd, Polycab, L&T
	h.	CAT6 ethernet cable will be provided by IIT Palakkad. Connection to the workbenches is under the scope of the bidder.	

Who can Participate ?

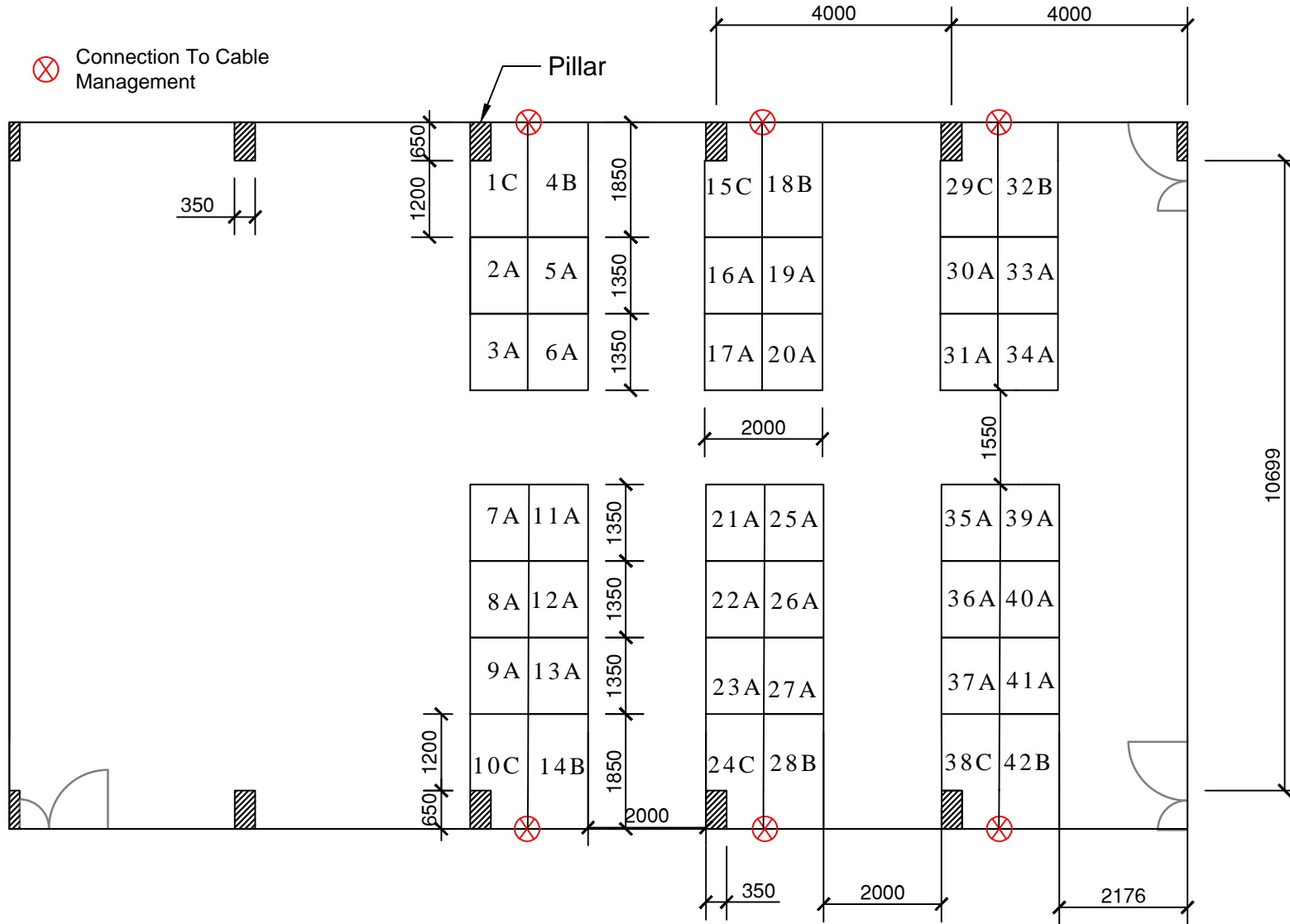
Only those bidders fulfilling the following criteria should respond to the tender.

1. The bidder should be either an Original Equipment Manufacturer (OEM) or authorized dealers of modular laboratory furniture.
2. The bidder should be a company registered under the Companies Act, 1956/2013 OR a Limited Liability Partnership /a registered partnership firm OR a sole-proprietorship entity. Appropriate Registration incorporation certificate must be submitted.
3. The bidder must have a registered office in Karnataka/Tamil Nadu/Telangana/Andhra Pradesh/Maharashtra or Kerala. Certificate of registration for the offices to be provided.
4. The bidder must be in existence in the business of modular laboratory furniture for a minimum period of 5 previous financial years (before or since 01 April 2012). Documentary evidences of experience must be provided.
5. The bidder should have implemented orders of modular laboratory furniture worth exceeding INR 3 lakhs during previous three financial years (01 April 2014 – 31 March 2017). Copies of the most recent purchase orders and certificates of successful implementation must be included.
6. The bidder should have documentary evidence of having supplied at least 1 order of modular laboratory furniture to a Centrally Funded Technical Institution (IIT, NIT, IISc, IISER) in the last three years (01 April 2014 – 31 Oct 2017). The bidder must provide a certificate of satisfactory performance of the supplied equipment from the institute to which they have recently supplied. Contact details of the faculty-in-charge of the installed setup must also be provided.
7. SEFA membership Certificates for last 4 years on a continuous basis.
8. Test Report: Welded cabinets should be third party tested for SEFA 8M by NABL approved lab.
9. OEM/Bidder must have ISO 9001-2008, ISO 14001-2004, BS OSHAS 18001-2007 (For Design, Development, Manufacturing, Supply and Servicing) certifications.
10. **Compliance sheet for the technical specification and OEM Brochure have to be attached along with the Technical bid. Vendor has to fill the compliance sheet and mention the page number or reference number in OEM brochure for each item in the compliance sheet. Unfilled / partially filled sheets lead to disqualification.**

Each Table Must Have:

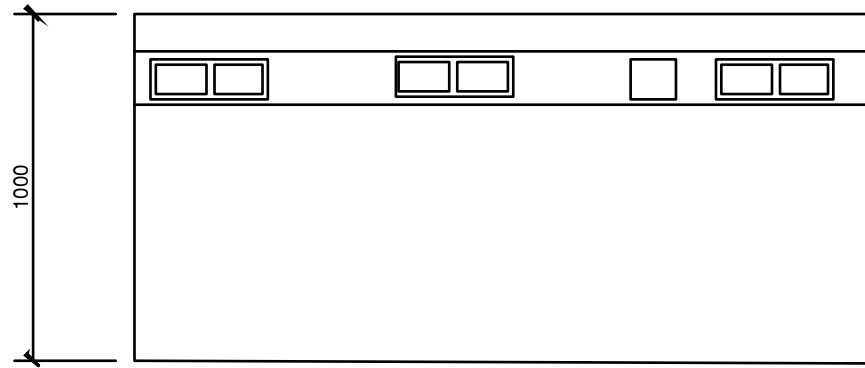
- * 6 X 5/15 Combi Socket (On UPS Power)
- * 1 X Data Point
- * Total 750W Per Table

⊗ Connection To Cable Management

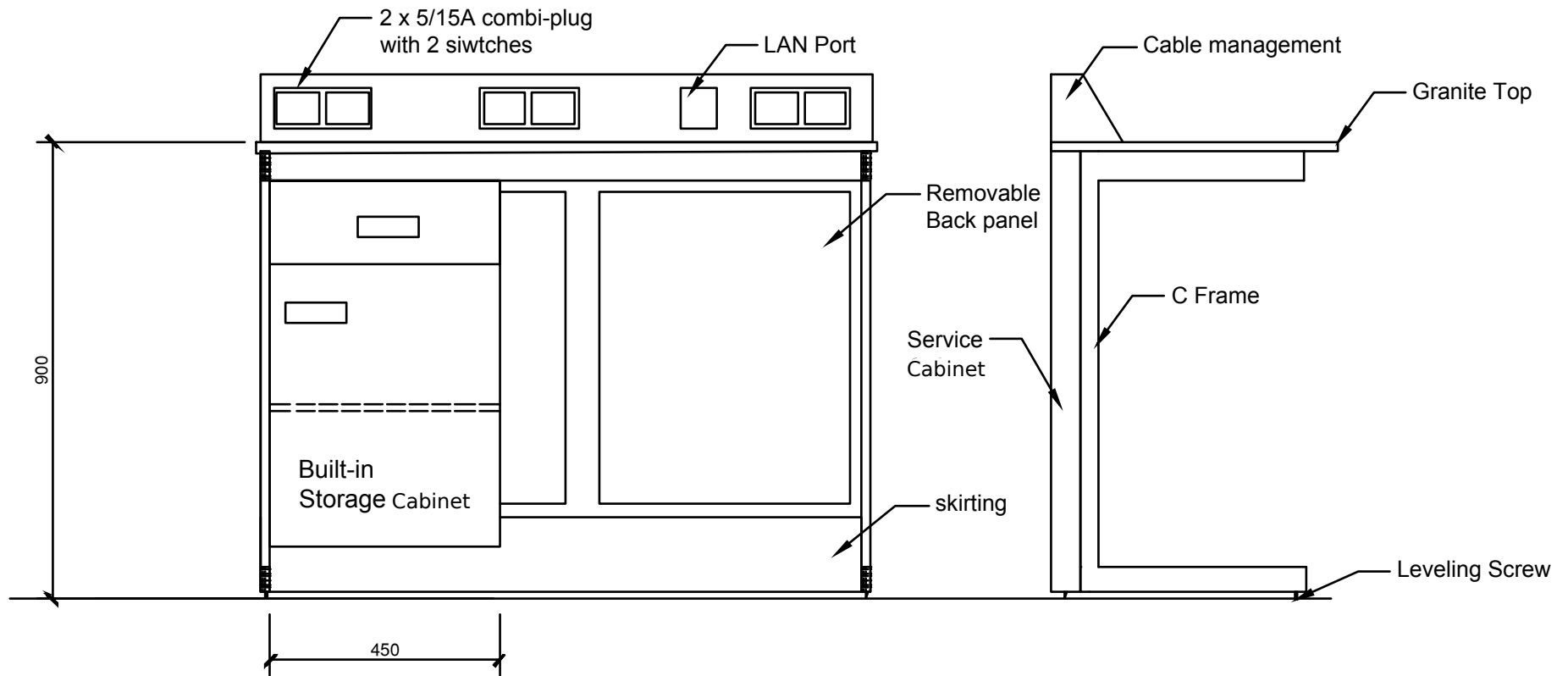


IIT PKD General Electronics Lab

Figure 1



Top View

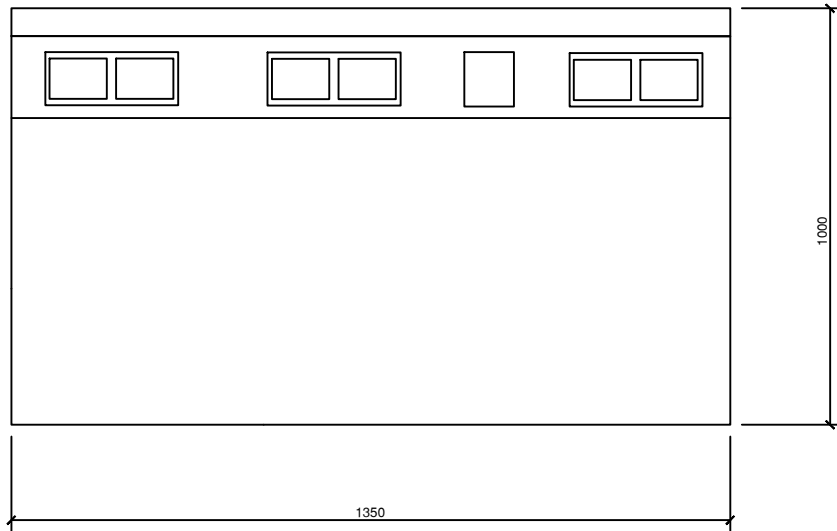


Front View

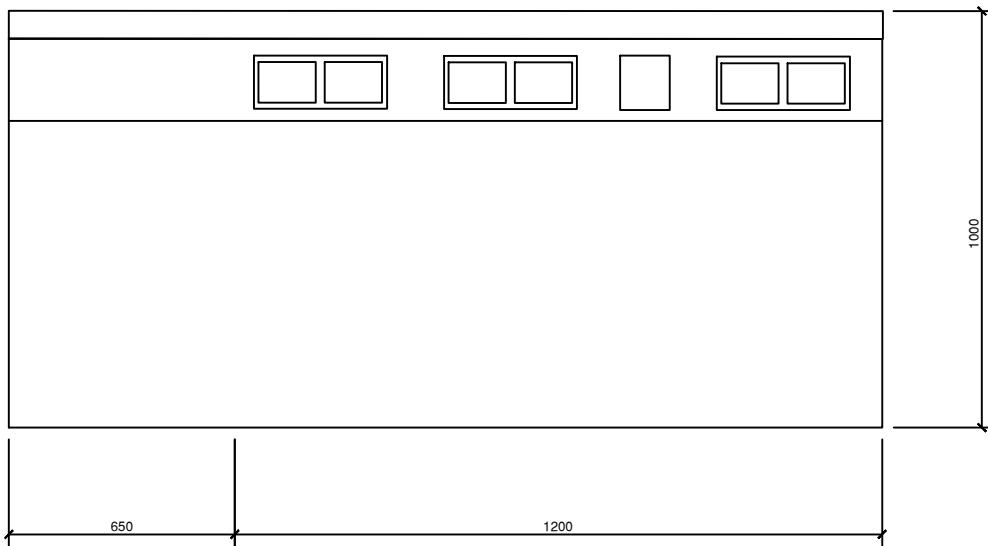
Side View

Type A Table

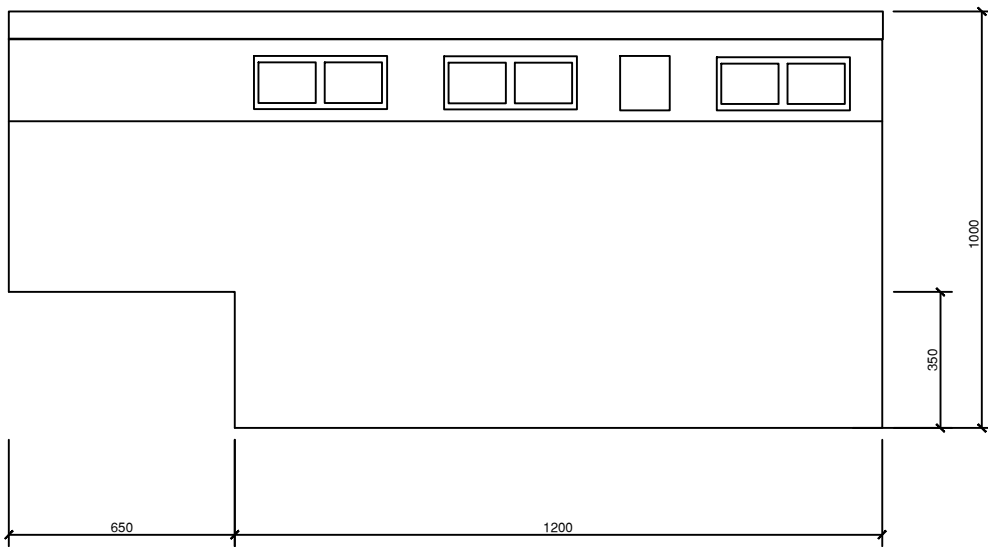
Figure 2



Indicative top view for type A TABLE

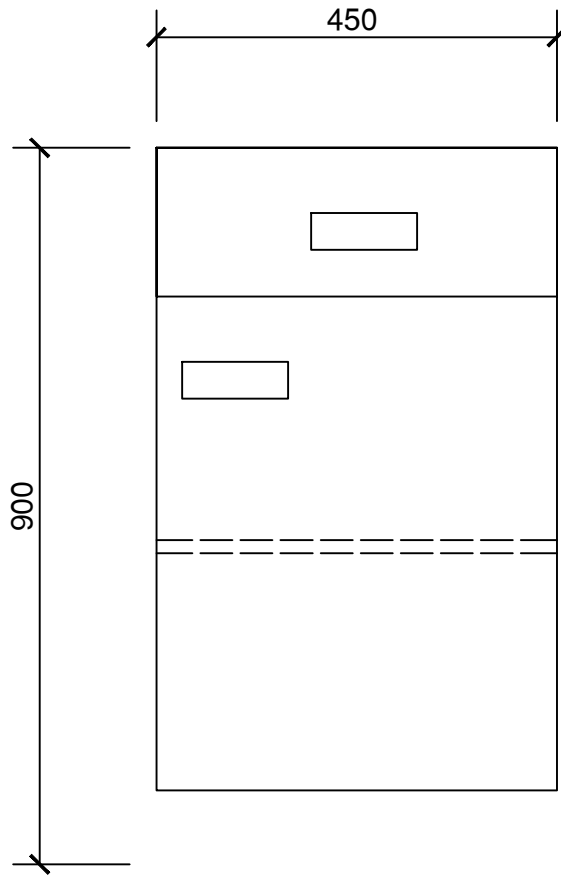


Indicative top view for type B TABLE

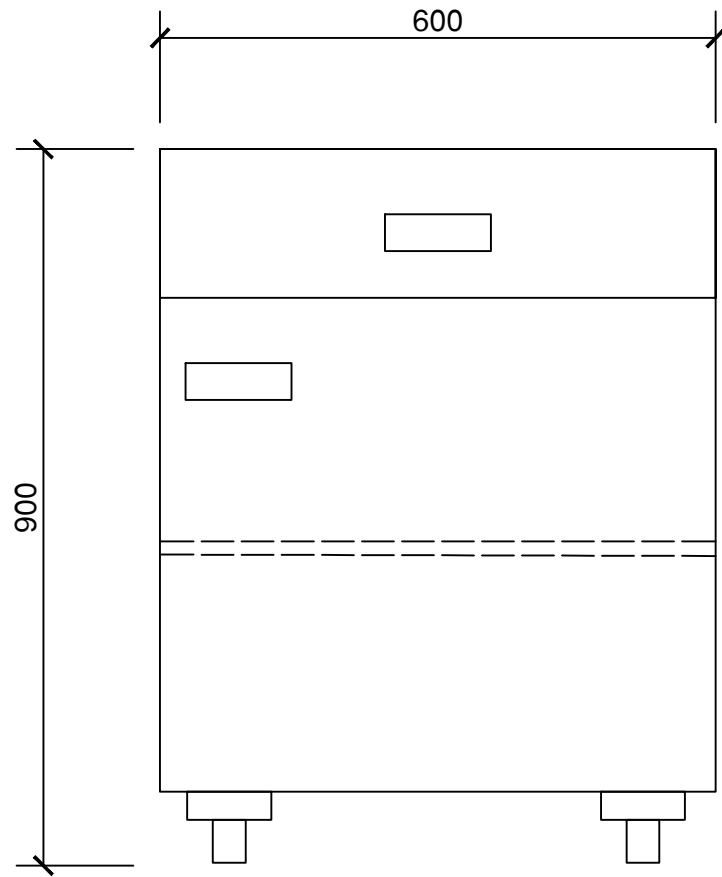


Indicative top view for table 1C

Figure 3

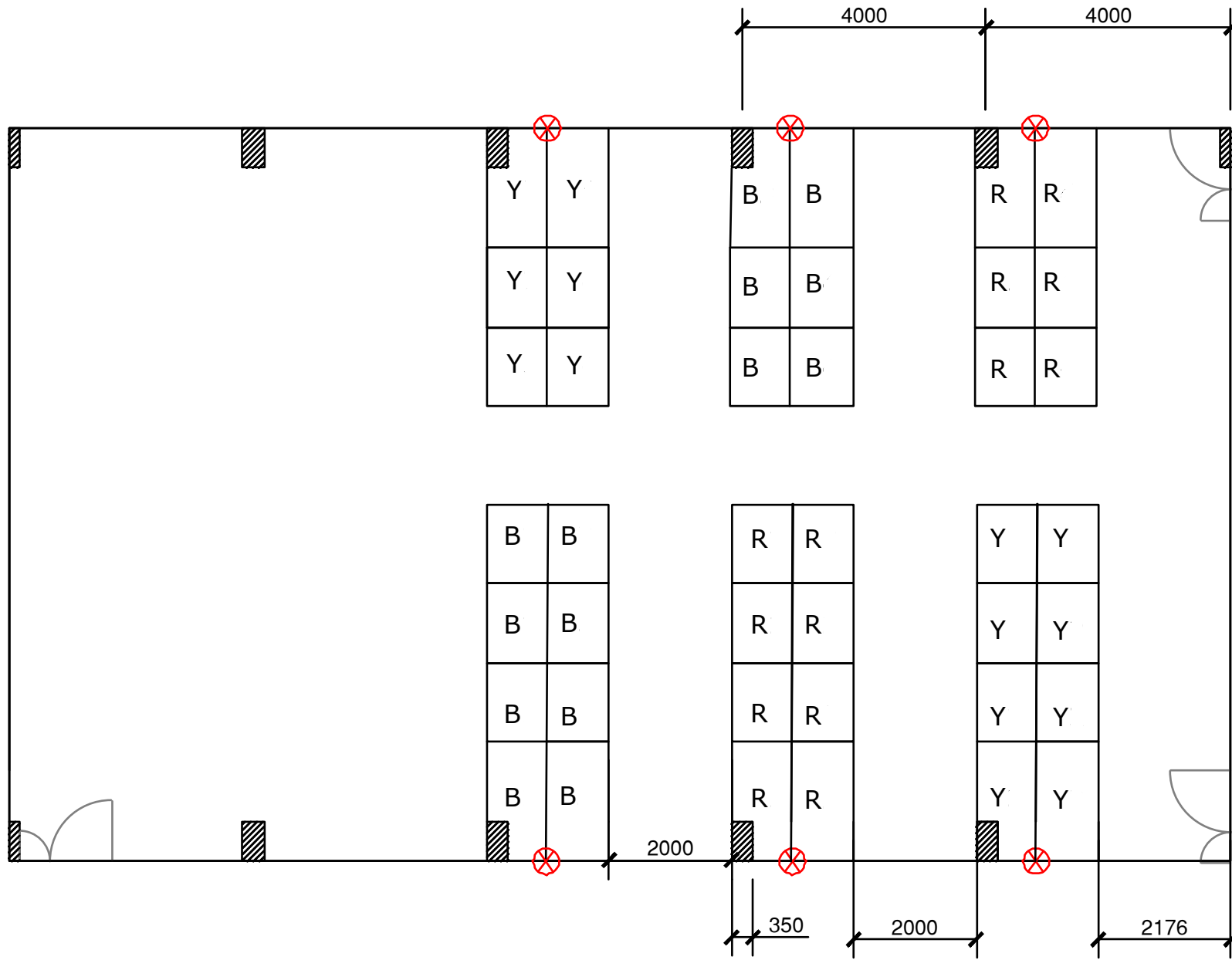


In Built Storage Cabinet
For Type A Tables



Storage Cabinet on Rollers
For Type B and C Tables

Figure 4



IIT PKD ELE LAB -Wiring Diagram

Figure 5