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CORRIGENDUM

Pre-bid meeting with the vendors was held on 11-August-2014 at IISER TVM (GEM Building) between 10:00 and 13:00. In response to the queries on the technical specifications by the vendors and also the discussions held during the pre-bid meeting with the vendors, T&PC has provided the corrigendum to the original document. The changes have been highlighted.

CORRIGENDUM TO TECHNICAL SPECIFICATION FOR LABORATORY FURNITURE

The general colour code for all the laboratory furniture shall preferably be a combination of white and light grey.

1. FUME HOODS

1.1 Compliance of Regulations and Standards

i. IS 4209:2013; ii. ASHRAE Standard 1101995; iii. SEFA 1; iv. ANSI Z9.5; v. NFPA 45;

1.2 Outer Construction/ super structure

The super structure shall be double walled construction. The double wall shall house, conceal steel framing members, attaching brackets and remote service fixture valves. It shall be constructed using high quality, cold rolled, mild and degreased steel meeting requirements of ASTM A366. The steel shall be galvanized and shall have a minimum thickness of 16 gauge. The exterior of the structure shall be epoxy powder coated for chemical resistance, scratch resistance and to prevent rusting. The rear part of the fume hood shall have service access for maintenance.

1.3 Inner lining and worktop

Internal side wall panels shall be fabricated using 6 mm thick liner of Trespa® TopLab*PLUS*® make. The work top shall be made of 20 mm thick material of Trespa® TopLab*PLUS*® make and shall be dish type or have skirting of approx. 10 mm. Worktop shall be placed at a height of 900 mm from the floor level.

1.4 Sash

The sash shall be constructed from transparent, scratch-resistant, shatter-resistant and flame resistant material. Combination of vertically and horizontally moving sashes shall be provided. The movement of the sash shall be smoothly controlled by an appropriate technology. All the components shall be manufactured using non-rusting material.

1.5 Electrical

Lighting fixtures shall be of fluorescent type. Light fixtures shall be sealed, vapour tight and protected by a transparent, scratch-resistant, shatter-resistant and flame resistant material. All the electrical switches and sockets shall be positioned outside the fume hood just below the work top. Each fume hood shall necessarily possess minimum six electrical sockets (220-240V, 6-16A). Each fume hood shall have a shunt

tripper for the safety control of all the electrical points. All the sockets shall be wired with 2.5 sq. mm copper conductor stranded FRLS insulated cable. The switches and sockets shall of one of the following makes –Legrand (ARTEOR SQUARE) or MK (WRAP SQUARE).

1.6 Service Valves, Plumbing and Drain

The facility for water inlet and outlet drain is already provided. There shall be provision for water supply with a single valve tap in each fume hood with a high density polypropylene (approx. dimension 80×160 mm) cup sink directly below this point. The shut-off valve or cock for the water supply shall be provided outside the fume hood. All the fittings shall be of one of the following makes –BROEN, Water Saver or Brownall Labtap.

1.7 Gas Supply

Provision for supply of (a) pressurized air and (b) inert gas (nitrogen or argon)

All the fume hoods in each of the labs shall be provided with (a) pressurized air and (b) inert gas (nitrogen or argon) facility. The gas supply tubing shall be manufactured using SS304. The tubing shall be installed with the help of elbows and T-junctions wherever possible and welds ,if, any shall be SS-TIG.

A calibrated control valve shall be provided outside each hood. There shall be a uniform distribution system for the gas supply and the maximum pressure of the outlet gas in each fume hood shall be 2 to 5 bars. All the gas valves shall be colour coded and be of one of the following makes – BROEN, Water Saver or Brownall Labtap. The inlet of the gas supply shall be placed near to the corridor adjacent to each lab.

An inert gas (nitrogen or argon) purification and control unit delivering UHP grade gases shall be provided for each lab.

Securing belts for cylinders meeting international standards shall be provided.

1.8 Baffles

The baffles shall be fabricated using minimum 6 mm thick liner of Trespa® TopLab*PLUS*®. At least three slots shall be provided for effective distribution of flow of air. They shall be placed at a distance of approximately 5 cm from the back liner and shall be removable for cleaning.

1.9 Blowers, Ducting, Duct Collar, Air Flow and Face Velocity

The noise level in the fume hood shall not exceed 50 decibels. High quality blowers meeting international standards shall be provided. The blowers shall be manufactured using non-rusting material and be protected by an outer casing made of high density polypropylene. The motors shall have high insulation value and shall work on 380-415 volts, 50 Hz, 3φ, 3W system with suitable rating MPCB and starters. The ducting and collars hall be done using fibre reinforced plastic (polypropylene). All the fume hoods shall have a face velocity of 80 to 100 fpm.

1.10 Air Foil

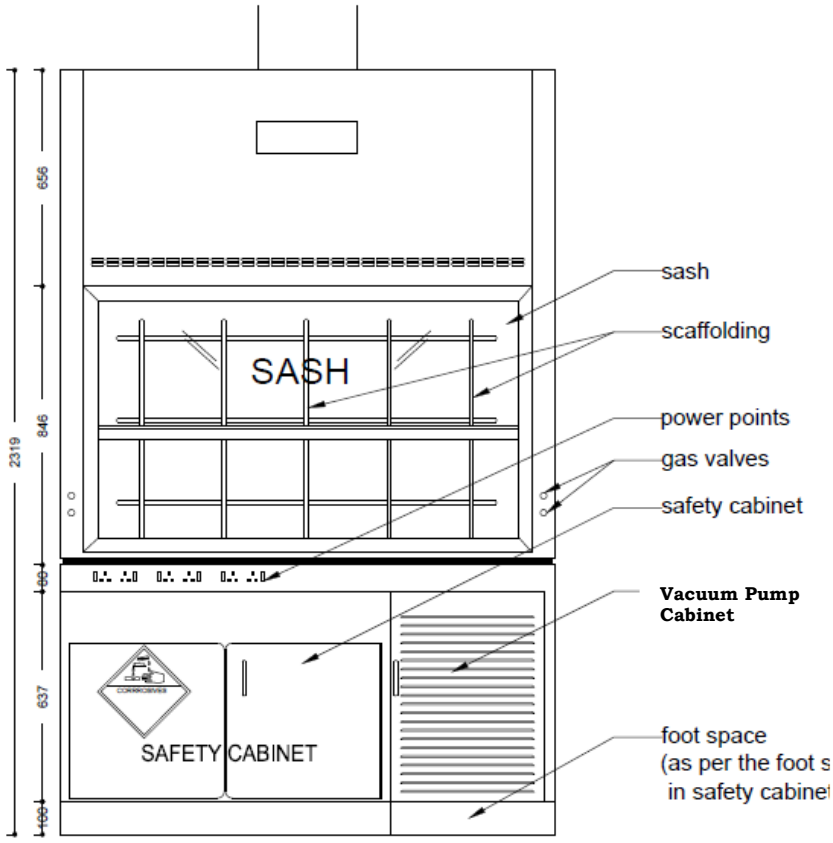
Air foil shall be manufactured using SS316 and shall be of aerodynamic design.

1.11 Dampers

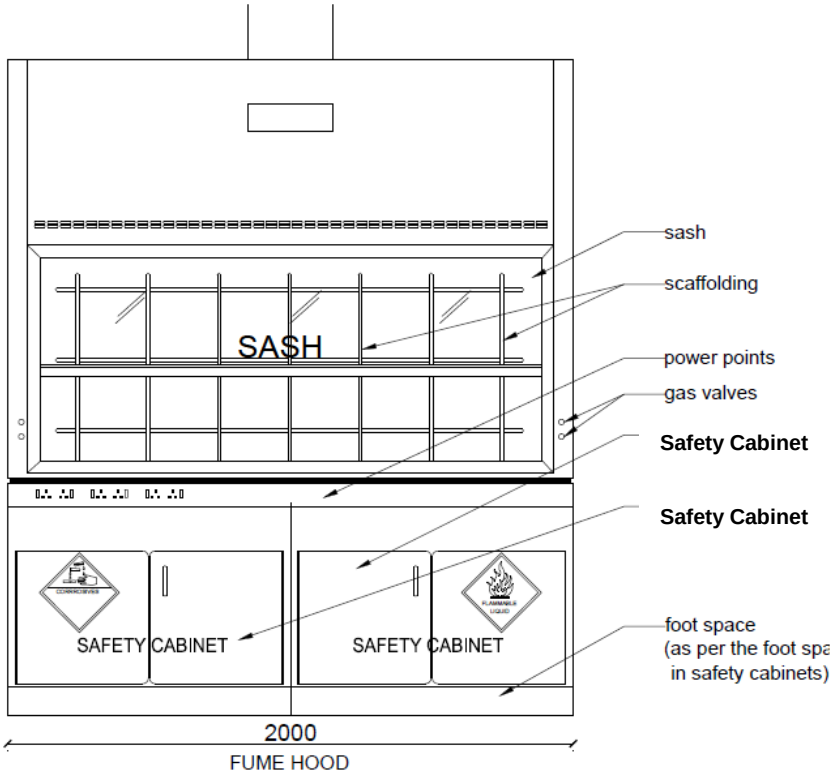
Suitable dampers meeting international standards shall be provided wherever necessary.

1.12 Cabinets below fume hood

Cabinets shall be provided as specification in 2.1 and 2.2. Cabinet for keeping vacuum pump shall be provided to all 1.5 m width fume hoods as depicted in the figure. It shall be made using high quality, cold rolled, mild and degreased steel meeting requirements of ASTM A366. The steel shall be galvanized and shall be of 16 gauge or thicker. The door shall be completely epoxy powder coated for chemical resistance, scratch resistance and to prevent rusting. The door shall have perforations in order to dissipate heat generated by vacuum pumps. The cabinet shall have one electrical socket (220-240V, 6-16A).There shall be an internal provision (hole of 30 mm diameter) to bring the vacuum tubing from the pump to the inside of the fume hood.



FUME HOOD



1.13 Scaffold/Lattice

A 5×4 (for 1.5 m fume hoods)/ 7×4 (for 2 m fume hoods) height and width adjustable scaffold made of SS 316 (minimum 12 mm diameter) shall be provided. The scaffold shall be of detachable type.

1.14 Variable air velocity (VAV) fume hoods

The vendors shall propose the VAV design. However specifications **1.1** to **1.13** shall be adhered.

2. CABINETS FOR CHEMICAL STORAGE

The chemical storage cabinets shall be of one of the following make

a) Justrite
b) Labor Security System
c) Securall
d) Lacont
e) Asecos

2.1 **Under Fume Hood Cabinets for Storage of Flammable Chemicals**

External Dimensions 600×1000×500 (H×W×D)
Fire Rating: Type 30

The cabinets shall have two self-closing doors. The cabinets shall be placed in such a way that there will be no gap between itself and the fume hood structure. The vents shall be connected to the fume shaft/blower. One height adjustable shelf shall be provided.

2.2 **Under Fume Hood Cabinets for Storage of Corrosive Chemicals**

External Dimensions 600×1000×500 (H×W×D)
The cabinets shall have two self-closing doors. The cabinets shall be placed in such a way that there will be no gap between itself and the fume hood structure. The vents shall be connected to the fume shaft/blower. One height adjustable shelf shall be provided.

2.3 **Stand-alone Cabinets for Storage of Flammable Chemicals**
External Dimensions 1700×1100×800 (H×W×D)
Fire Rating: Type 30
The cabinet shall have two self-closing doors. At least five height adjustable shelves shall be provided. The vents shall be connected to the fume shaft/blower.

2.4 **Stand-alone Cabinets for Storage of Corrosive Chemicals**
External Dimensions 1700×1100×800 (H×W×D)
The cabinet shall have two self-closing doors. At least five height adjustable shelves shall be provided. The vents shall be connected to the fume shaft/blower.

3. ISLAND TABLE
Dimensions: 900×1500 (H×D). Width as per requirement

3.1 **Compliance of Regulations and Standards:**
i. IS 4209:2013;ii. SEFA 8 (meant for wooden furniture)

3.2 **Supporting Structure**
The island table shall have H-frame design. The supporting structure shall be manufactured using high quality, cold rolled, mild and degreased steel meeting requirements of ASTM A366. The steel shall be galvanized and shall have a minimum thickness of 16 gauge. The H-frame steel section shall have dimensions of 30×30×1.5 mm. The exterior of the structure shall be epoxy powder coated for chemical resistance, scratch resistance and to prevent rusting.

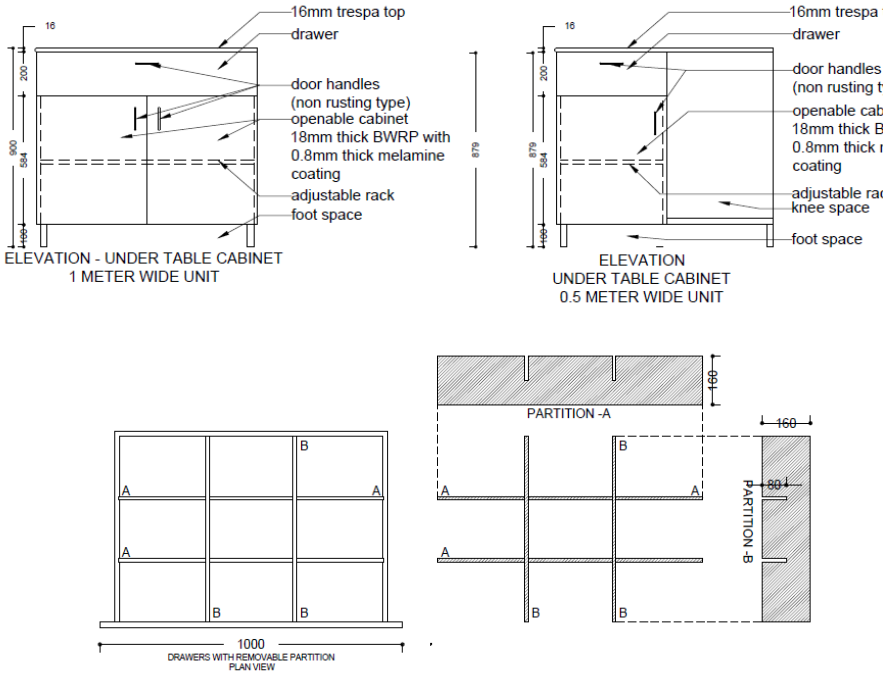
3.3 **Work top**
The work top of 16 mm thick material of Trespa® TopLab*PLUS*® shall be placed 900 mm above the floor level.

3.4 **Reagent Shelves**
Two height adjustable reagent racks made of wire reinforced glass shall be provided supported by non-corrosive metal structure.

3.5 **Storage Cabinets and drawers**
Under table cabinet and drawer combination for island table, 500 mm wide
Under table cabinet and drawer combination for island table, 1000 mm wide
Drawer dimension: 200×600 (H×D)
Cabinet dimension: 500×600 (H×D)

A combination of storage cabinets (single/double doors) and drawers shall be constructed using minimum 18 mm thick boiling water resistant plywood (complying IS:303:2010) and shall have a 0.8 mm thick melamine coating (complying BIS 71 0:1976, IS: 5509-1980) The coating shall comply IS: 5509-2000. The cabinet and drawer combination shall

be fixed 100 mm above the floor level. The railings and hinges shall be of Hettich, Häfele or KAFF make made of SS 304. The door and drawer handles shall be of non-rusting type. A height adjustable partition shall be provided in all the cabinets. The drawers shall be provided with a combination of removable partitions. The edges shall have PVC lipping of minimum of 3 mm thickness. This will be laminated with melamine laminate of thickness 0.8 mm thickness.

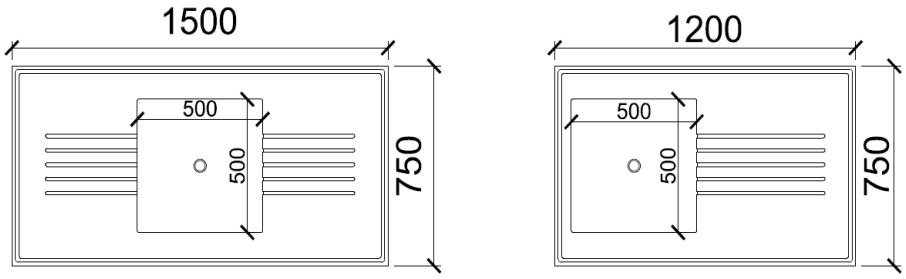


3.6 Electricals

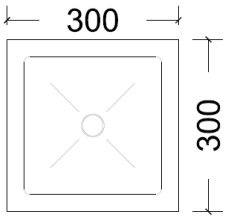
All the electrical switches and sockets shall be positioned just below the lower reagent rack. Each running meter of the island table shall necessarily possess two electrical sockets each (220-240V, 6-16A) on either side of the island table. All the sockets shall be wired with 2.5 sq. mm copper conductor stranded FRLS insulated cable. The switches and sockets shall of one of the following makes –Legrand (ARTEOR SQUARE) or MK (WRAP SQUARE).

3.7 Sinks, Service Valves, Plumbing and Drain

The facility for water inlet and outlet drain is already provided. The fittings from the vendor shall be compatible with the same. Sink made of technical ceramic/ chemical stone ware (of one of the makes - Fridurit, MONOLITE IPERGRES, or Keraplan) shall be provided. Different designs of the sinks are mentioned in the figure below. Wherever necessary, technical ceramic/ chemical stone ware sink shall be integrated with a work top of same material having four or five parallel grooves in which the waste liquids can rapidly flow towards the basin (see figure). Wherever necessary, high density polypropylene (approx. dimension 80×150×150 mm) cup sinks shall be provided along with three valved water tap. All the service fittings shall be of one of the following makes - BROEN/ Water Saver/ Brownall Labtap or equivalent. The water tap shall be a three valved one.



Sinks with grooves



On Top Mounting Type Sink

3.8 **Eyewasher**

BROEN/ Water Saver/ Brownall Labtap make. It shall be fixed near the sink with a suitable mount. The eye shower shall have an angled double head and shall have proper grip for holding it in the hands.

4 WALL TABLE

Dimensions: 900×750 (H×D). Width as per requirement
Dimensions: 900×1000 (H×D). Width as per requirement

4.1 **Compliance of Regulations and Standards:**

i. IS 4209:2013;ii. SEFA 8 (meant for wooden furniture)

4.2 **Supporting Structure**

The island table shall have H-frame design. The supporting structure shall be manufactured using high quality, cold rolled, mild and degreased steel meeting requirements of ASTM A366. The H-frame steel section shall have dimensions of 30×30×1.5. The exterior of the structure shall be epoxy powder coated for chemical resistance, scratch resistance and to prevent rusting. The legs shall be height adjustable.

4.3 **Work top**

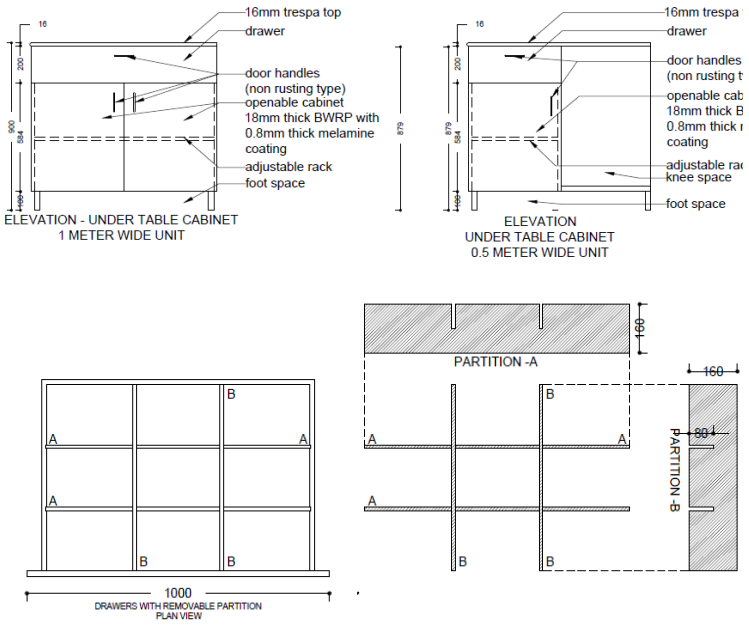
The work top of 16 mm thick material of Trespa® TopLab*PLUS*® shall be placed 900 mm above the floor level.

4.4 **Storage Cabinets and drawers**

Under table cabinet and drawer combination for wall table, 500 mm wide
Under table cabinet and drawer combination for wall table, 1000 mm wide
Drawer dimension: 200×600 (H×D)
Cabinet dimension: 500×600 (H×D)

A combination of storage cabinets (single/double doors) and drawers shall be constructed using minimum 18 mm thick boiling water resistant

plywood (complying IS:303:2010) and shall have a 0.8 mm thick melamine coating (complying BIS 71 0:1976, IS: 5509-1980) The coating shall comply IS: 5509-2000. The cabinet and drawer combination shall be fixed 100 mm above the floor level. The railings and hinges shall be of Hettich, Häfele or KAFF make made of SS 304. The door and drawer handles shall be of non-rusting type. A height adjustable partition shall be provided in all the cabinets. The drawers shall be provided with a combination of removable partitions. The edges shall have PVC lipping of minimum of 3 mm thickness. This will be laminated with melamine laminate of thickness 0.8 mm thickness.

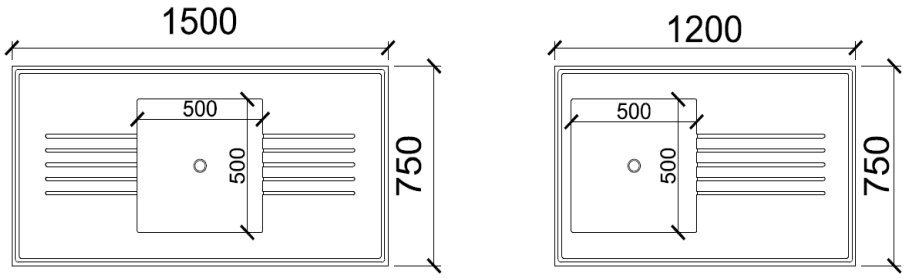


4.5 Electricals

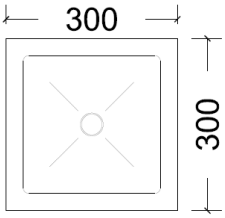
All the electrical switches and sockets shall be positioned just below the lower reagent rack. Each running meter of the island table shall necessarily possess two electrical sockets each (220-240V, 6-16A) on either side of the island table. All the sockets shall be wired with 2.5 sq. mm copper conductor stranded FRLS insulated cable. The switches and sockets shall of one of the following makes –Legrand (ARTEOR SQUARE) or MK (WRAP SQUARE).

4.6 Sinks, Service Valves, Plumbing and Drain

The facility for water inlet and outlet drain is already provided. The fittings from the vendor shall be compatible with the same. Sink made of technical ceramic/ chemical stone ware (of one of the makes - Fridurit, MONOLITE IPERGRES, or Keraplan) shall be provided. Different designs of the sinks are mentioned in the figure below. Wherever necessary, technical ceramic/ chemical stone ware sink shall be integrated with a work top of same material having four or five parallel grooves in which the waste liquids can rapidly flow towards the basin (see figure). Wherever necessary, high density polypropylene (approx. dimension 80×150×150 mm) cup sinks shall be provided along with three valved water tap. All the service fittings shall be of one of the following makes - BROEN/ Water Saver/ Brownall Labtap or equivalent. The water tap shall be a three valved one.



Sinks with grooves



On Top Mounting Type Sink

Wherever necessary, high density polypropylene (approx. dimension 80×150×150 mm) cup sinks shall be provided.

4.7 **Eyewasher**

BROEN/ Water Saver/ Brownall Labtap make. It shall be fixed near the sink with a suitable mount. The eye shower shall have an angled double head and shall have proper grip for holding it in the hands.

5. PEG BOARDS

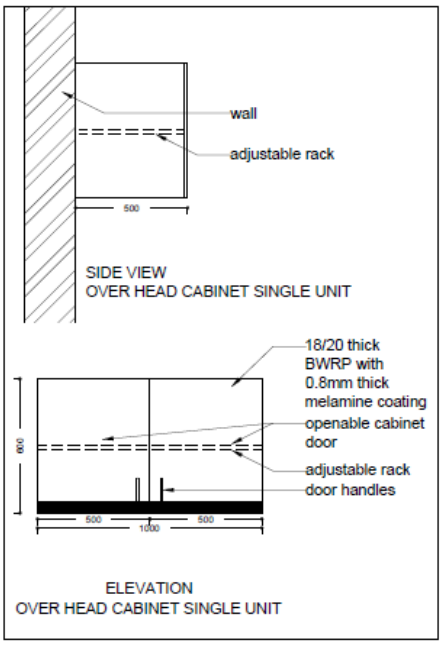
The peg board shall be manufactured from high density polypropylene and shall be of mounting type. It shall have approximate dimensions of 700 ×600 mm and shall possess at least 54 pegs. Each peg shall have an approximate length of 125 mm and diameter of 10 mm. The load capacity of each peg shall be greater than 4 kg. The peg board shall have a drip rack at the bottom which has to be directly connected to the drain

6. OVERHEAD CABINETS

External Dimensions 600×1000×500 (H×W×D)

Compliance of Regulations and Standards: SEFA 8W-2010

A combination of storage cabinets (single/double doors) and drawers shall be constructed using 18 to 20 mm thick boiling water resistant plywood (complying IS:303:2010) and shall have a 0.8 mm thick melamine coating (complying BIS 71 0:1976, IS: 5509-1980) The coating shall comply IS: 5509-2000. The railings and hinges shall be of Hettich, Häfele or KAFF make and of SS 304 standard. The door and drawer handles shall be of non-rusting type. A height adjustable partition shall be provided in all the cabinets.



7. EMERGENCY SAFETY SHOWERS

BROEN/ Water Saver/ Brownall Labtap make. It shall be of floor mounting type and shall also have a dual head eye wash.

8. STUDENT WORKING TABLE

The student working tables shall be made shall be constructed using 18 to 20 mm thick boiling water resistant plywood (complying IS:303:2010) and shall have a 0.8 mm thick melamine coating (complying BIS 71 0:1976, IS: 5509-1980). The coating shall comply IS: 5509-2000.The table shall be supported by necessary sections.

LIST OF ITEMS FOR LABORATORY FURNITURE

Item #	Item
1)	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width
2)	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width
3)	Variable Air Velocity (VAV) Hood, 1.5 m width
4)	Variable Air Velocity (VAV) Hood, 2.0 m width
5)	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width
6)	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width
7)	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width
8)	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width
9)	Blower*
10)	Ducting*
11)	Inert gas (nitrogen/argon) purification unit
12)	Security belts for gas cylinder
13)	Under Fume Hood Cabinets for Storage of Flammable Chemicals
14)	Under Fume Hood Cabinets for Storage of Corrosive Chemicals
15)	Stand-alone Cabinets for Storage of Flammable Chemicals
16)	Stand-alone Cabinets for Storage of Corrosive Chemicals
17)	Island table with reagent racks, Trespa top, 1.5 m depth
18)	BWRP Under table cabinet and drawer combination for island table, 0.5 m wide
19)	BWRP Under table cabinet and drawer combination for island table, 1.0 m wide
20)	Wall table, Trespa top, 0.75 m depth
21)	Wall Table, Trespa top, 1.0 m depth
22)	BWRP Under table cabinets and drawer combination for wall table, 0.5 m wide
23)	BWRP Under table cabinets and drawer combination for wall table, 1.0 m wide
24)	Chemical Stoneware sink with extended worktop having grooves(1500×750×350) fitted with three valve water tap
25)	Chemical Stoneware sink with extended worktop having grooves (1200×750×350) fitted with three valve water tap
26)	On Top Mounting Type Chemical Stoneware Sink (300×300×250) fitted with three valve water tap
27)	Polypropylene sink fitted with three valve water tap (500×500×350)
28)	Polypropylene cup sink fitted with single valve water tap
29)	Peg Board
30)	Overhead Cabinet (600×1000×500)
31)	Safety Eye washer
32)	Emergency safety shower
33)	Student working table

*Necessary ducting and blowers for the fume hoods in each lab shall be included.

1) The CAD drawings of the laboratories can be obtained upon request.
2) Vendors shall be provided with the layouts of all the labs.
3) Vendors must submit a full 3D rendering of **LAB B2** in both hardcopy [full colour printout] & softcopy [CD] formats.
4) Vendors shall be allowed to visit the actual site with prior appointment.

5) Vendors shall provide separate quotes for each item in the above list. Consolidated quote for the total project, transportation, installation, taxes and any other incidental charges shall be provided.
6) **The total project quote shall be considered to evaluate the financial bid.**
7) All the listed items shall have a minimum warranty of one year from date of issue of completion certificate.
8) Items fabricated in the vendor's factory should be inspected and cleared by an authorized team from IISERTVM before shipping to site.
9) The vendor must demonstrate the compliance of all the installations to the listed standards and specifications at site before handing over to the users. All costs incurred during this process shall be borne by the vendors.

Optional to be provided by Vendors

Vendors shall additionally quote the annual maintenance cost (AMC) for furniture that requires regular service for four years following the warranty period. AMC shall be quoted for each year separately.

Evaluation of the Technical Bid

The vendors shall adhere to the technical specifications as decided by T&PC. The technical bid will be evaluated on the following points:

Sl.No.	**Technical Bid Evaluation Criteria**	**Maximum Marks**
1	Technical specifications	50
2	Assessment of the quality of the executed projects*	30
3	Rework of the provided lab layouts for all labs	10
4	3-D layout for Lab B2	05
5	Execution plan and time schedule	05

* During the evaluation of the technical bid, T&PC shall set up sub-committees to assess the quality of the executed projects which are at least two years old and having similar technical specifications. The sub-committee will make visits, assess the executed projects and report to the T&PC with their recommendations.

Vendors shall require 60 marks to be technically qualified.

The compliance table must be necessarily filled by the vendors.

COMPLIANCE OF TECHNICAL SPECIFICATIONS

Pt.No	Technical Specifications	Specifications by Vendor
1	**Fume Hoods:**	
1.1	***Compliance of Regulations and Standards***	
1.2	***Outer Construction/ super structure*** Super structure design	
	Steel quality	
	Steel thickness	
	Coating for the exterior structure	
1.3	***Inner lining and worktop*** Make and thickness internal lining.	
	Make and thickness of the worktop.	
	Skirting details	
1.4	***Sash*** Design	
	Material	

	Technology for sash movement	
1.5	***Electrical*** Protection of light fixtures	
	Positioning of switches and sockets	
	Wiring specification	
	Number of electrical sockets	
	Make of switches and sockets	
	Safety control of electrical points	
1.6	***Service Valves, Plumbing and Drain*** Make of the service valves	
	Make and specification of plumbing material	
	Make and specification of sink	
1.7	***Gas Supply*** Provision for supply of (a) pressurized air (b) inert gas (nitrogen or argon)	
	Tubing material	
	Make of the gas valves and control valves	
	Details of belts for securing gas cylinders	
	Details of inert gas purification unit	
1.8	***Baffles*** Baffle material	
	Baffle thickness	
	Positions of baffles in the fume hood	
1.9	***Blowers, Ducting, Duct Collar, Air Flow and Face Velocity*** Noise Level	
	Blower details	
	Material for collar	
	Material and diameter of ducting tube	
	Face velocity	
1.10	***Air Foil*** Material and design	
1.11	***Dampers*** Material and design	
1.12	***Cabinets below fume hood*** Cabinets shall be provided as specification in 2.1 and 2.2. Cabinet for keeping vacuum pump – material, finish and design.	
1.13	***Scaffold/Lattice*** Material, thickness and design	
1.14	Details of VAV technology	
2	**Cabinets for Chemical Storage** Make of the cabinet	
2.1	***Under Fume Hood Cabinets for Storage of Flammable Chemicals*** Dimensions of the cabinet	
	Fire Safety Rating	
	Number of shelves	
	Connectivity to the fume shaft/blower	
2.2	***Under Fume Hood Cabinets for Storage of***	

	Corrosive Chemicals Dimensions of the cabinet	
	Number of shelves	
	Connectivity to the fume shaft/blower	
2.3	***Stand-alone Cabinets for Storage of Flammable Chemicals*** Dimensions of the cabinet	
	Fire Safety Rating	
	Number of shelves	
	Connectivity to the fume shaft/blower	
2.4	***Stand-alone Cabinets for Storage of Corrosive Chemicals*** Dimensions of the cabinet	
	Number of shelves	
	Connectivity to the fume shaft/blower	
3	**Island Table**	
3.1	***Compliance of Regulations and Standards***	
3.2	***Supporting Structure*** Design and dimensions	
	Steel quality	
	Exterior coating	
3.3	***Work top*** Make	
	Thickness	
	Depth	
3.4	***Reagent Shelves*** Design	
	Number of shelves	
	Material	
3.5	***Storage Cabinets and drawers*** Dimensions	
	Plywood quality and compliance	
	Fire retardant coating for the plywood and compliance	
	Make and railings and hinges and standards	
	Specification for door and drawer handles	
	Number of removable partition in cabinets	
	Number of removable partition in drawers	
	Lipping material and thickness and coating	
3.6	***Electricals*** Positioning of electrical switches and sockets	
	Number of electrical sockets	
	Specification of the wire quality	
	Make of switches and sockets	
3.7	***Sinks, Service Valves, Plumbing and Drain*** Make of the sink	
	Sink material	
	Make of the service fittings	
3.8	***Eye washer*** Make	
	Design	
4	**Wall Table**	

4.1	***Compliance of Regulations and Standards***	
4.2	***Supporting Structure*** Design and dimensions	
	Steel quality	
	Exterior coating	
4.3	***Work top*** Make	
	Thickness	
	Depth	
4.4	***Storage Cabinets and drawers*** Dimensions	
	Plywood quality and compliance	
	Fire retardant coating for the plywood and compliance	
	Make and railings and hinges and standard	
	Specification for door and drawer handles	
	Number of removable partition in cabinets	
	Number of removable partition in drawers	
	Lipping material and thickness and coating	
4.5	***Electricals*** Positioning of electrical switches and sockets	
	Number of electrical sockets	
	Specification of the wire quality	
	Make of switches and sockets	
4.6	***Sinks, Service Valves, Plumbing and Drain*** Make of the sink	
	Sink material	
	Make of the service fittings	
4.7	***Eye washer*** Make	
	Design	
5	**Peg Board** Material	
	Dimensions	
	Load capacity per peg	
6	**Overhead Cabinets** Dimensions	
	Compliance of Regulations and Standards	
	Plywood quality and compliance	
	Fire retardant coating for the plywood and compliance	
	Make and railings and hinges and standards	
	Number of height adjustable partitions	
7	**Emergency Safety Showers** Make	
	Design	
8	**Student Working table** Design	
	Plywood quality and compliance	
	Fire retardant coating for the plywood and compliance	

ITEM LIST

ITEM NO.	ITEM	Ref #	QTY	UNIT	UNIT PRICE	TOTAL PRICE
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1	38	Nos		
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1	2	Nos		
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1	17	Nos		
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1	1	Nos		
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width		1	Nos		
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width		0	Nos		
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width		1	Nos		
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width		1	Nos		
9	Blower*	1.9		Nos		
10	Ducting*	1.9		meter		
11	Inert gas (nitrogen/argon) purification unit	1.7	16	Nos		
12	Security belts for gas cylinder		37	Nos		
13	Under Fume Hood Cabinets for Storage of Flammable Chemicals	2.1	33	Nos		
14	Under Fume Hood Cabinets for Storage of Corrosive Chemicals	2.2	26	Nos		
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3	30	Nos		
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4	22	Nos		
17	Island table with reagent racks, Trespa top, 1.5 m depth*	3	98	meter		
18	BWRP Under table cabinet and drawer combination for island table, 0.5 m wide	3.5	102	Nos		
19	BWRP Under table cabinet and drawer combination for island table, 1.0 m wide	3.5	66	Nos		
20	Wall table, Trespa top, 0.75 m depth	4	189.25	meter		
21	Wall Table, Trespa top, 1.0 m	4	22.25	meter		

	depth*					
22	BWRP Under table cabinets and drawer combination for wall table, 0.5 m wide	4.4	23	Nos		
23	BWRP Under table cabinets and drawer combination for wall table, 1.0 m wide	4.4	115	Nos		
24	Chemical Stoneware sink with extended worktop having grooves (1500×750×350) fitted with three valve water tap	3.7	9	Nos		
25	Chemical Stoneware sink with extended worktop having grooves (1200×750×350) fitted with three valve water tap	3.7	7	Nos		
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250) fitted with three valve water tap	4.6	48	Nos		
27	Polypropylene sink(500×500×350) fitted with three valve water tap		5	Nos		
28	Polypropylene cup sink	4.6	6	Nos		
29	Peg Board	5	62	Nos		
30	Overhead Cabinet 600×1000×500	6	72	Nos		
31	Safety Eyewasher	4.7	12	Nos		
32	Emergency safety shower	7	24	Nos		
33	Student working table	9	31	meter		
					TOTAL	
					VAT	
					EXCISE DUTY	
					INSTALLATION CHARGES	
					OTHER CHARGES [IF ANY]	
					GRAND TOTAL	
					AMOUNT IN WORDS:	

Note: *No. of blowers shall be proposed by vendors

***(10)Ducting, (17)Island table and (20)(21)Wall table -per meter rates should be quoted.**

Where the rate quoted by the Vendor in figures and in words tally but the amount is not worked out correctly the rate quoted by the Vendor will be taken as correct and not the amount.

The due date of the above said tender has been re-fixed to 16th September 2014 [3 PM]

Deputy Registrar [F&A]
Addl. Charge [P&S]

ANNEXURE I TO
Corrigendum
Dated 22nd August 2014

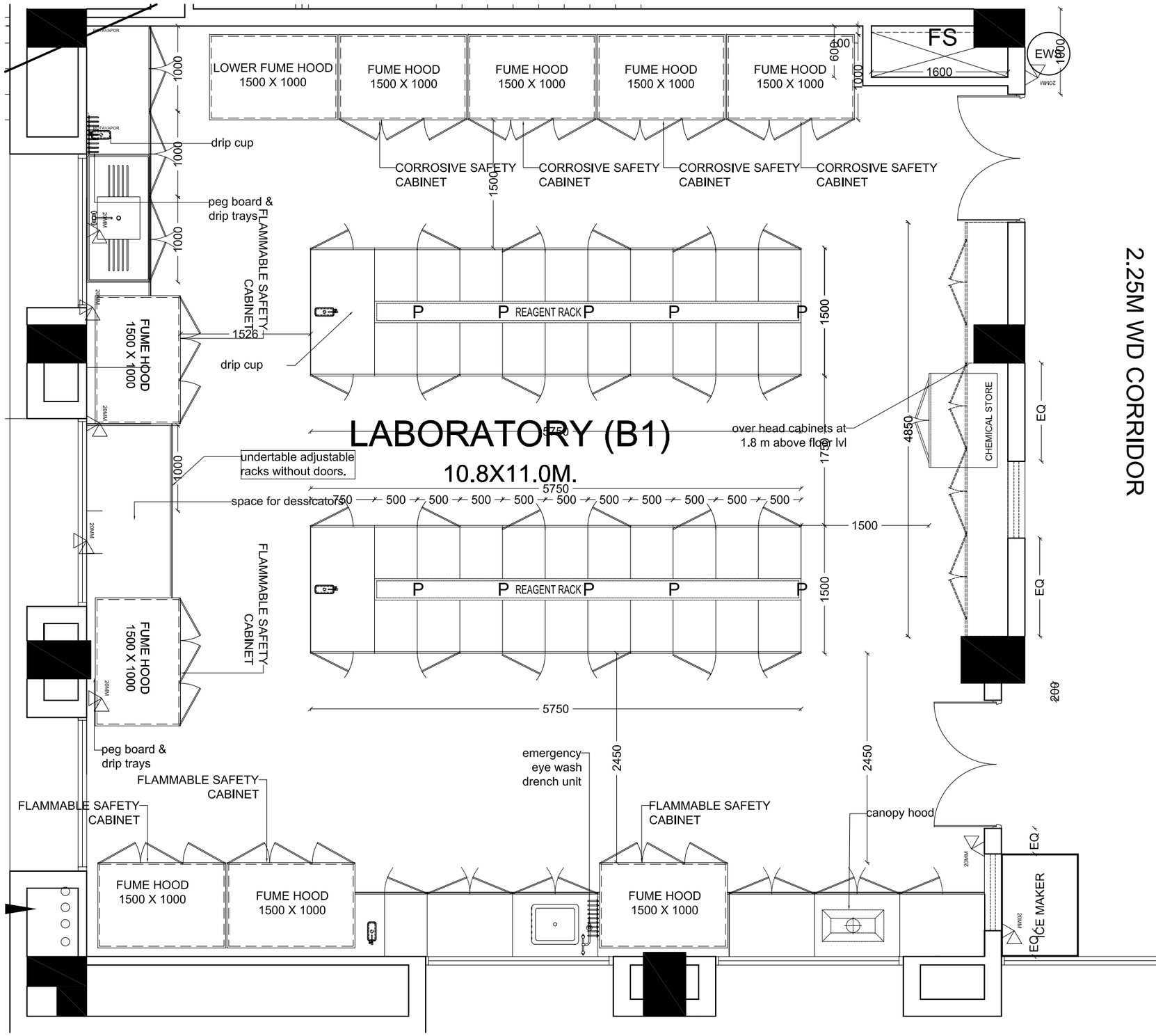
ITEMLIST FOR LAB- B1

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1	9		**9**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1			**0**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width		1		**1**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	*Blower	1.9			**REQUIRED**
10	*Ducting	1.9			**REQUIRED**
11	Inert gas (nitrogen/argon) purification unit	1.7	1		**1**
12	Security belts for gas cylinder		2		**2**
13	**Under Fume Hood Cabinets** for Storage of **Flammable Chemicals**	2.1	5		**5**
14	**Under Fume Hood Cabinets** for Storage of **Corrosive Chemicals**	2.2	4		**4**
15	**Stand-alone Cabinets** for Storage of **Flammable Chemicals**	2.3			**0**
16	**Stand-alone Cabinets** for Storage of **Corrosive Chemicals**	2.4	1		**1**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3		12	**12**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5	20		**20**
19	**BWRP Under table** cabinet and drawer combination for island table, **1.0 m wide**	3.5	4		**4**
20	**Wall table**, Trespa top, **0.75 m depth**	4		9	**9**
21	**Wall Table**, Trespa top, **1.0 m depth**	4		2	**2**
22	**BWRP Under table cabinets** and drawer combination for wall table, **0.5 m wide**	4.4	1		**1**
23	**BWRP Under table cabinets** and drawer combination for wall table, **1.0 m wide**	4.4	8		**8**
24	**Chemical Stoneware sink** with extended worktop having grooves **(1500×750×350)**	3.7	1		**1**
25	**Chemical Stoneware sink** with extended worktop having grooves **(1200×750×350)**	3.7			**0**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)		1		**1**
28	Polypropylene cup sink	4.6	6		**6**
29	Peg Board	5	2		**2**
30	Overhead Cabinet 600×1000×500	6	4		**4**
31	Safety Eyewasher	4.7	1		**1**
32	Emergency safety shower	7			**0**
33	Student working table	9			**0**

Note: *Blowers to be installed.

****Ducting, Island Table and Wall Table- per meter rates should be quoted.***

Contd....2



2.25M WD CORRIDOR

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LAYOUT OF LABORATORY - B1

CHEMICAL SCIENCE DEPARTMENT

		REVISION: R11
DRAWN :	**CHECKED:**	**APPROVED:**
DWG No.: IISER-T/LL/CSD-B1, R2		**DATE :** 20/06/2014
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ITEMLIST FOR LAB- B13

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	**total**
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1			**0**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1	6		**6**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			**0**
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			**REQUIRED**
10	Ducting*	1.9			**REQUIRED**
11	Inert gas (nitrogen/argon) purification unit	1.7	1		**1**
12	Security belts for gas cylinder		2		**2**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1	3		**3**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2	3		**3**
15	Stand-alone Cabinets for Storage of **Flammable Chemicals**	2.3	1		**1**
16	Stand-alone Cabinets for Storage of **Corrosive Chemicals**	2.4			**0**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3		5	**5**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5	10		**10**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5			**0**
20	**Wall table**, Trespa top, **0.75 m depth**	4		16.5	**16.5**
21	**Wall Table**, Trespa top, **1.0 m depth**	4			**0**
22	**BWRP Under table** cabinets and drawer combination for **wall table**, **0.5 m wide**	4.4	2		**2**
23	**BWRP Under table cabinet**s and drawer combination for **wall table**, **1.0 m wide**	4.4	13		**13**
24	**Chemical Stoneware sink** with extended worktop having grooves **(1500×750×350)**	3.7			**0**
25	**Chemical Stoneware sink** with extended worktop having grooves **(1200×750×350)**	3.7	2		**2**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)				**0**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5	2		**2**
30	Overhead Cabinet 600×1000×500	6		11	**11**
31	Safety Eyewasher	4.7	1		**1**
32	Emergency safety shower	7			**0**
33	Student working table	9			**0**

Note: *Blowers to be installed.

****Ducting, Island Table and Wall Table- per meter rates should be quoted.***

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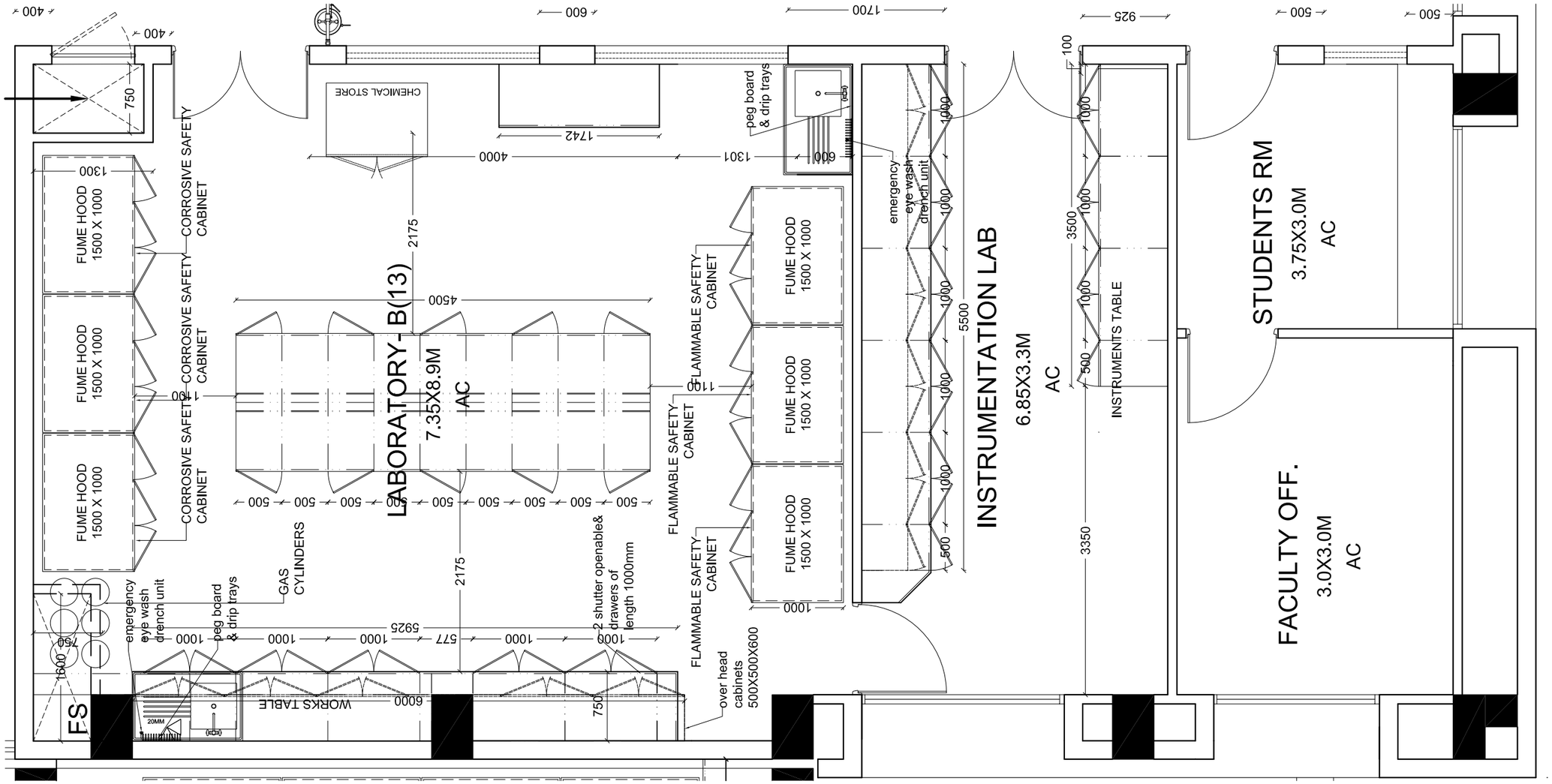

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LAYOUT OF LABORATORY - B13 AT CSD		
		REVISION R-08
DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B13		DATE : 30/05/2014
SCALE : 1:50@A3	*All Dimensions are in* ***mm***	

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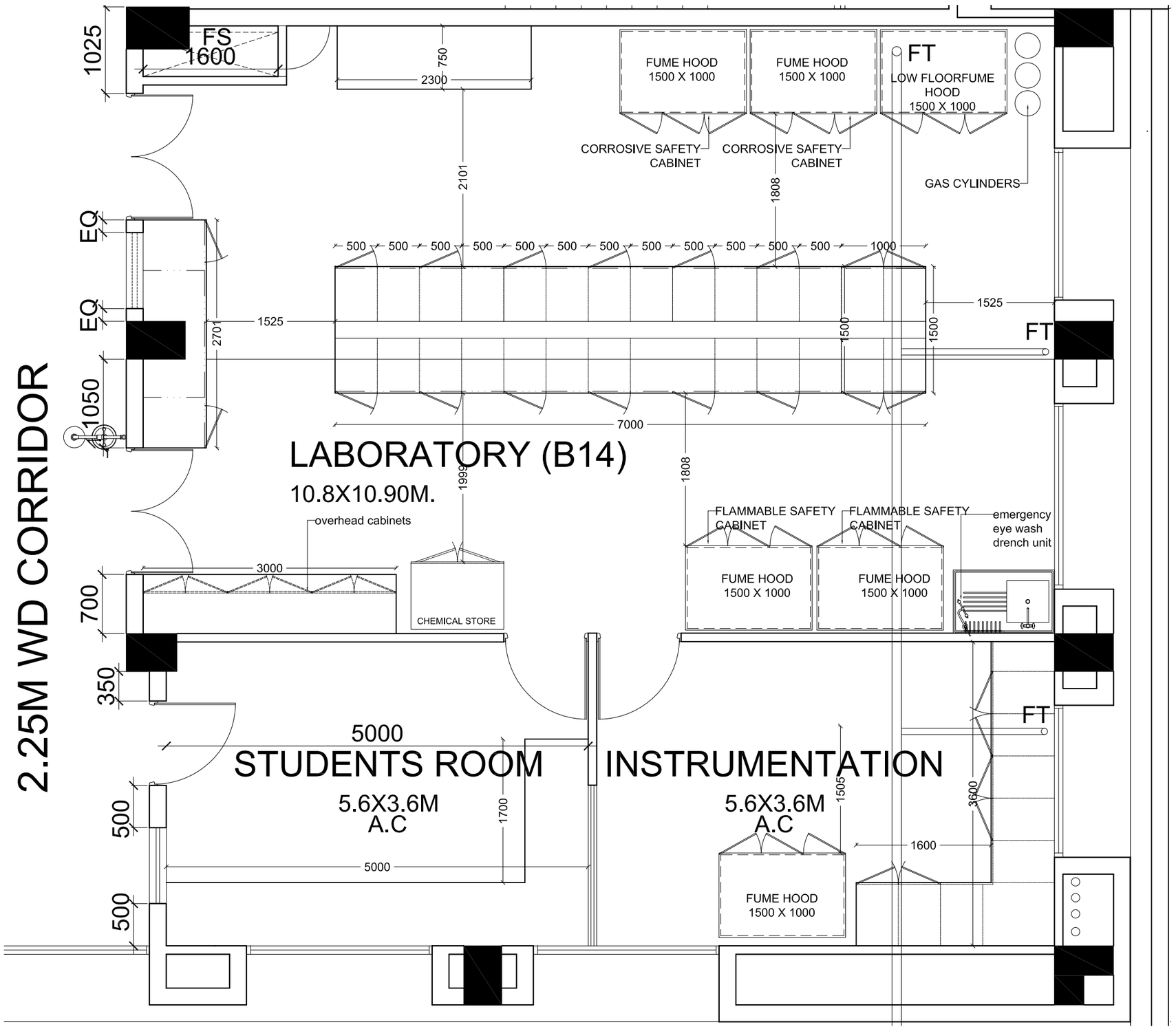
ITEMLIST FOR LAB- 14

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1	5		**5**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1			**0**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width		1		**1**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			**REQUIRED**
10	Ducting*	1.9			**REQUIRED**
11	Inert gas (nitrogen/argon) purification unit	1.7	1		**1**
12	Security belts for gas cylinder		3		**3**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1	2		**2**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2	3		**3**
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3			**0**
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4	1		**1**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3		7	**7**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5	12		**12**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5	2		**2**
20	**Wall table**, Trespa top, **0.75 m depth**	4		11	**11**
21	**Wall Table**, Trespa top, **1.0 m depth**	4			**0**
22	**BWRP Under table** cabinets and drawer combination for **wall table**, **0.5 m wide**	4.4			**0**
23	**BWRP Under table cabinet**s and drawer combination for **wall table**, **1.0 m wide**	4.4	6		**6**
24	Chemical Stoneware sink with extended worktop having grooves (1500×750×350)	3.7			**0**
25	Chemical Stoneware sink with extended worktop having grooves (1200×750×350)	3.7	1		**1**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)				**0**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5	1		**1**
30	Overhead Cabinet 600×1000×500	6			**0**
31	Safety Eyewasher	4.7	1		**1**
32	Emergency safety shower	7			**0**
33	Student working table	9		7	**7**

Note: *Blowers to be installed.

****Ducting, Island Table and Wall Table- per meter rates should be quoted.***

contd...6



LAYOUT OF LABORATORY - B14

CHEMICAL SCIENCE DEPARTMENT

REVISION: R5

DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B14		DATE : 21/06/2014
SCALE : 1:50@A3	*All Dimensions are in* ***mm***	

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contd....7

ITEMLIST FOR LAB- B15

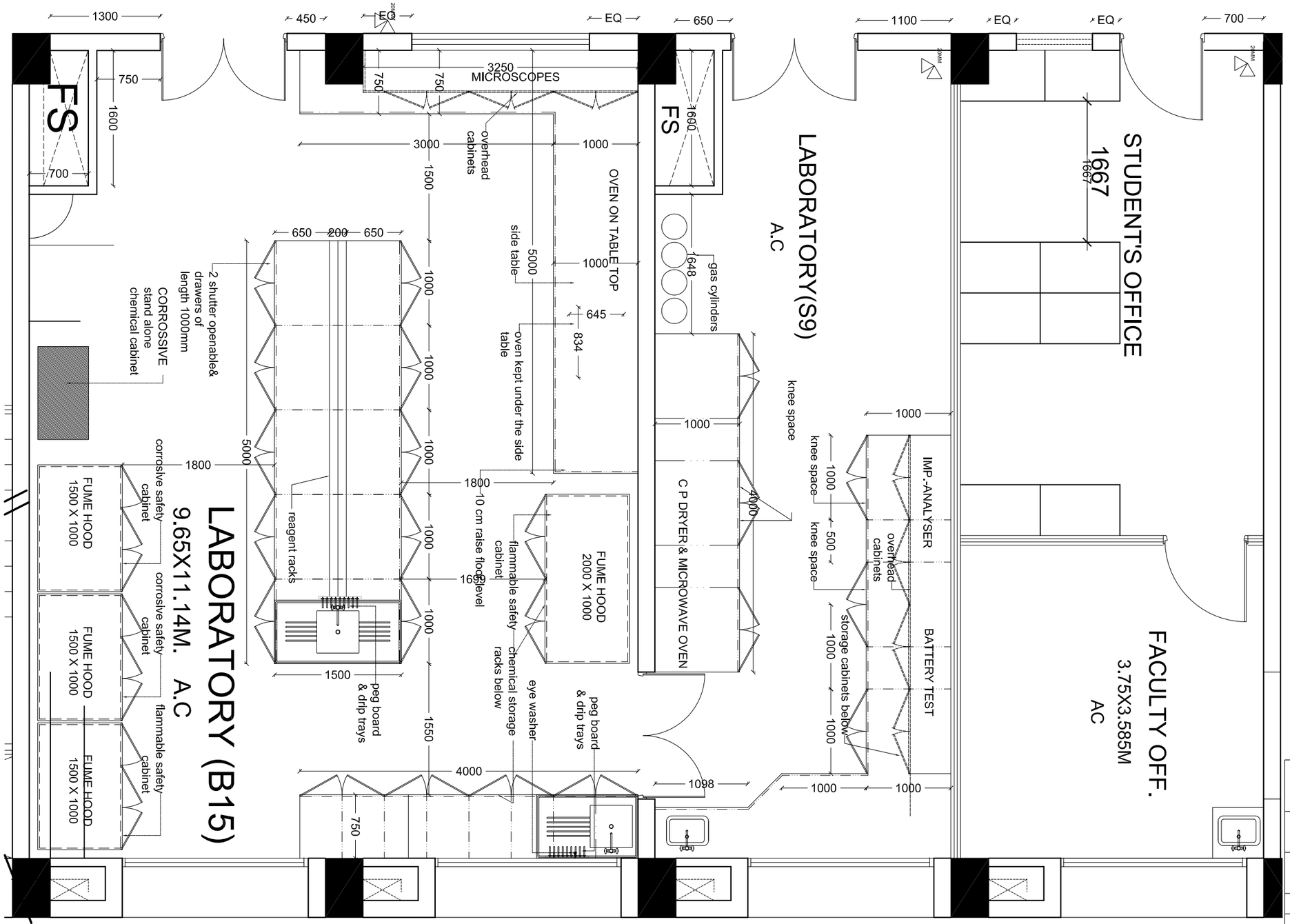
Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1			**0**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1	3		**3**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1	1		**1**
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			**REQUIRED**
10	Ducting*	1.9			**REQUIRED**
11	Inert gas (nitrogen/argon) purification unit	1.7	2		**2**
12	Security belts for gas cylinder		9		**9**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1	3		**3**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2	2		**2**
15	Stand-alone Cabinets for Storage of **Flammable Chemicals**	2.3			**0**
16	Stand-alone Cabinets for Storage of **Corrosive Chemicals**	2.4	1		**1**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3		5	**5**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5			**0**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5	10		**10**
20	**Wall table**, Trespa top, **0.75 m depth**	4		8	**8**
21	**Wall Table**, Trespa top, **1.0 m depth**	4		15	**15**
22	**BWRP Under table cabinets** and drawer combination for wall table, **0.5 m wide**	4.4			**0**
23	**BWRP Under table cabinets** and drawer combination for wall table, **1.0 m wide**	4.4	10		**10**
24	**Chemical Stoneware sink** with extended worktop having grooves **(1500×750×350)**	3.7	1		**1**
25	**Chemical Stoneware sink** with extended worktop having grooves **(1200×750×350)**	3.7	1		**1**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)		2		**2**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5	2		**2**
30	Overhead Cabinet 600×1000×500	6	7		**7**
31	Safety Eyewasher	4.7	1		**1**
32	Emergency safety shower	7	1		**1**
33	Student working table	9			**0**

Note: *Blowers to be installed.

***Ducting, Island Table and Wall Table- per meter rates should be quoted.**

Contd....8

2.25M WD CORRIDOR



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LAYOUT OF LABORATORY - S9

CHEMICAL SCIENCE DEPARTMENT

		REVISION: R6
DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-S9		DATE : 30/05/2014
SCALE : 1:50@A3	*All Dimensions are in **mm***	

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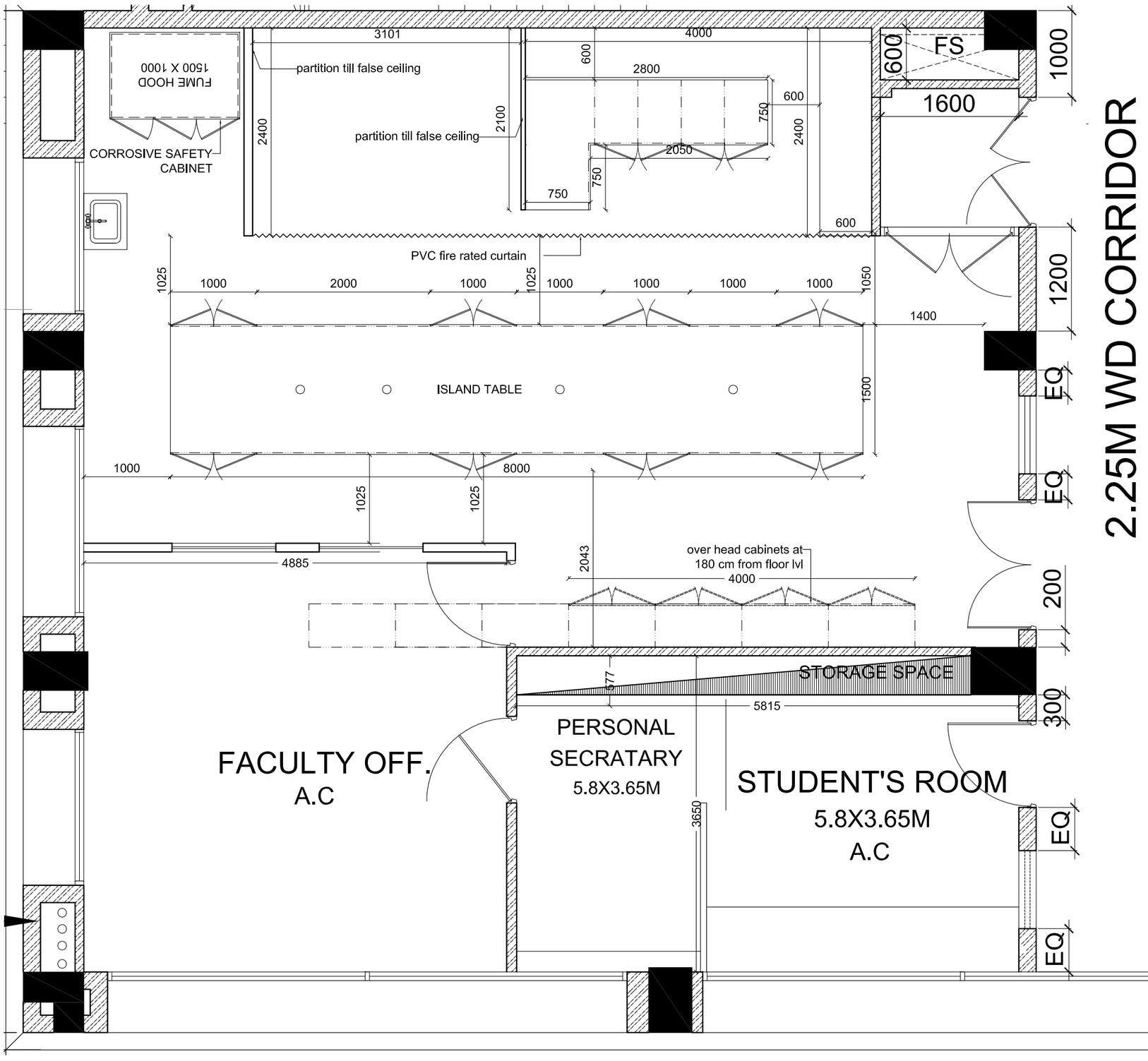
ITEMLIST FOR LAB- B17

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	**total**
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1			**0**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1	1		**1**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			**0**
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			**required**
10	Ducting*	1.9			**required**
11	Inert gas (nitrogen/argon) purification unit	1.7	1		**1**
12	Security belts for gas cylinder				**0**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1			**0**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2			**0**
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3			**0**
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4			**0**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3		8	**8**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5			**0**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5	8		**8**
20	**Wall table**, Trespa top, **0.75 m depth**	4	4		**4**
21	**Wall Table**, Trespa top, **1.0 m depth**	4			**0**
22	**BWRP Under table** cabinets and drawer combination for **wall table**, **0.5 m wide**	4.4			**0**
23	**BWRP Under table cabinet**s and drawer combination for **wall table**, **1.0 m wide**	4.4	2		**2**
24	Chemical Stoneware sink with extended worktop having grooves (1500×750×350)	3.7			**0**
25	Chemical Stoneware sink with extended worktop having grooves (1200×750×350)	3.7			**0**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)		1		**1**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5			**0**
30	Overhead Cabinet 600×1000×500	6		4	**4**
31	Safety Eyewasher	4.7			**0**
32	Emergency safety shower	7			**0**
33	Student working table	9		4	**4**

Note: *Blowers to be installed.

****Ducting, Island Table and Wall Table- per meter rates should be quoted.***

contd....10



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LAYOUT OF LABORATORY - B17

CHEMICAL SCIENCE DEPARTMENT

		REVISION: R5
DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B17		DATE : 21/06/2014
SCALE : 1:50@A3	*All Dimensions are in **mm***	

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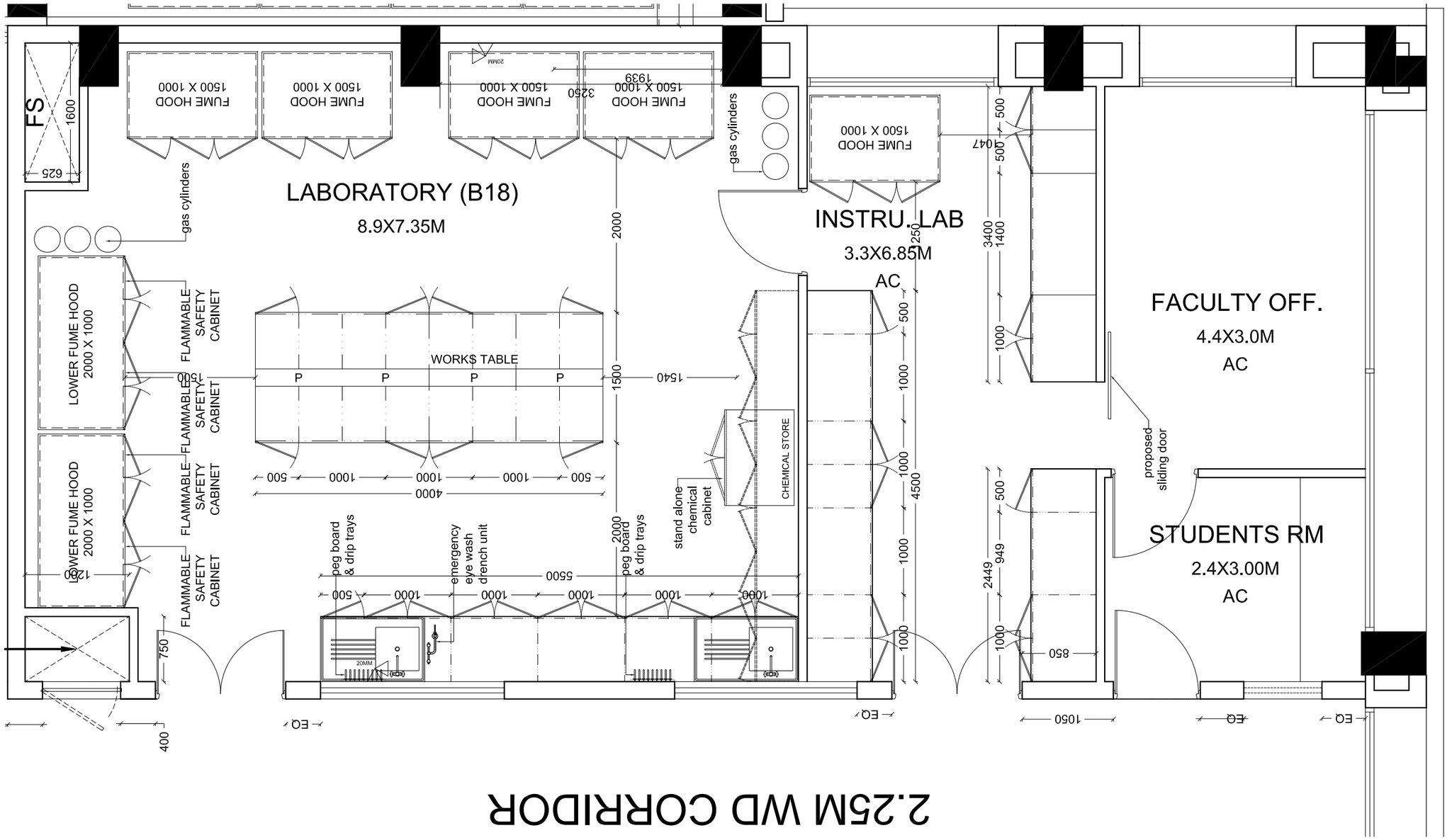
ITEMLIST FOR LAB- B18

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1	4		**4**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1	2		**2**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1	1		**1**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			**REQUIRE**
10	Ducting*	1.9			**REQUIRE**
11	Inert gas (nitrogen/argon) purification unit	1.7	1		**1**
12	Security belts for gas cylinder		4		**4**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1	6		**6**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2	2		**2**
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3	1		**1**
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4			**0**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3		4	**4**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5	4		**4**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5	2		**2**
20	**Wall table**, Trespa top, **0.75 m depth**	4		16	**16**
21	**Wall Table**, Trespa top, **1.0 m depth**	4			**0**
22	**BWRP Under table** cabinets and drawer combination for **wall table**, **0.5 m wide**	4.4	3		**3**
23	**BWRP Under table cabinet**s and drawer combination for **wall table**, **1.0 m wide**	4.4	10		**10**
24	**Chemical Stoneware sink** with extended worktop having grooves **(1500×750×350)**	3.7			**0**
25	**Chemical Stoneware sink** with extended worktop having grooves **(1200×750×350)**	3.7	2		**2**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)				**0**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5	3		**3**
30	Overhead Cabinet 600×1000×500	6		5	**5**
31	Safety Eyewasher	4.7	1		**1**
32	Emergency safety shower	7			**0**
33	Student working table	9			**0**

Note: *Blowers to be installed.

****Ducting, Island Table and Wall Table- per meter rates should be quoted.***

contd....12



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LAYOUT OF LABORATORY - B18		
CHEMICAL SCIENCE DEPARTMENT		
		REVISION - R04
DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B18		DATE : 30/05/2014
SCALE : 1:50@A3	*All Dimensions are in **mm***	

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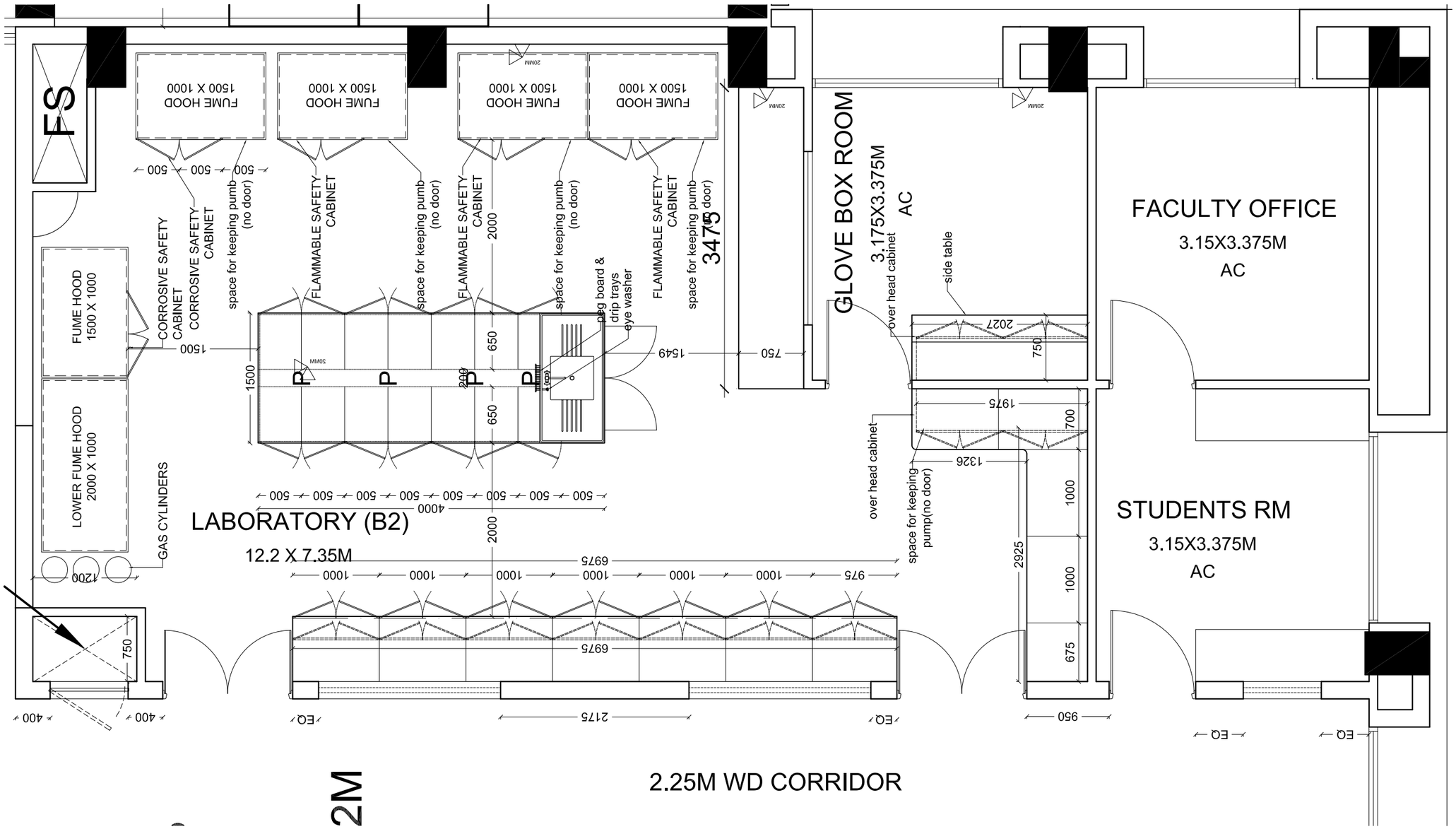
ITEMLIST FOR LAB- B2

Item No	Item	Reference No.**	Qty in Nos	Qty in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1			**0**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1	5		**5**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			**0**
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width		1		**1**
9	Blower*	1.9			**required**
10	Ducting*	1.9			**required**
11	Inert gas (nitrogen/argon) purification unit	1.7	1		**1**
12	Security belts for gas cylinder		3		**3**
13	Under Fume Hood Cabinets for Storage of Flammable Chemicals	2.1	3		**3**
14	Under Fume Hood Cabinets for Storage of Corrosive Chemicals	2.2	2		**2**
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3			**0**
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4			**0**
17	Island table with reagent racks, Trespa top, 1.5 m depth	3		4	**4**
18	BWRP Under table cabinet and drawer combination for island table, 0.5 m wide	3.5	2		**2**
19	BWRP Under table cabinet and drawer combination for island table, 1.0 m wide	3.5	6		**6**
20	Wall table, Trespa top, 0.75 m depth	4		11	**11**
21	Wall Table, Trespa top, 1.0 m depth	4			**0**
22	BWRP Under table cabinets and drawer combination for wall table, 0.5 m wide	4.4			**0**
23	BWRP Under table cabinets and drawer combination for wall table, 1.0 m wide	4.4	7		**7**
24	Chemical Stoneware sink with extended worktop having grooves (1500×750×350)	3.7	1		**1**
25	Chemical Stoneware sink with extended worktop having grooves (1200×750×350)	3.7			**0**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)				**0**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5	1		**1**
30	Overhead Cabinet 600×1000×500	6	11		**11**
31	Safety Eyewasher	4.7	1		**1**
32	Emergency safety shower	7			**0**
33	Student working table	9		4	**4**

Note: *Blowers to be installed.

****Ducting, Island Table and Wall Table- per meter rates should be quoted.***

contd.....14



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LAYOUT OF LABORATORY - B2		
CHEMICAL SCIENCE DEPARTMENT		
		REVISION: **R4**
DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B2		DATE : 30 /05/2014
SCALE : 1:50@A3	*All Dimensions are in* ***mm***	

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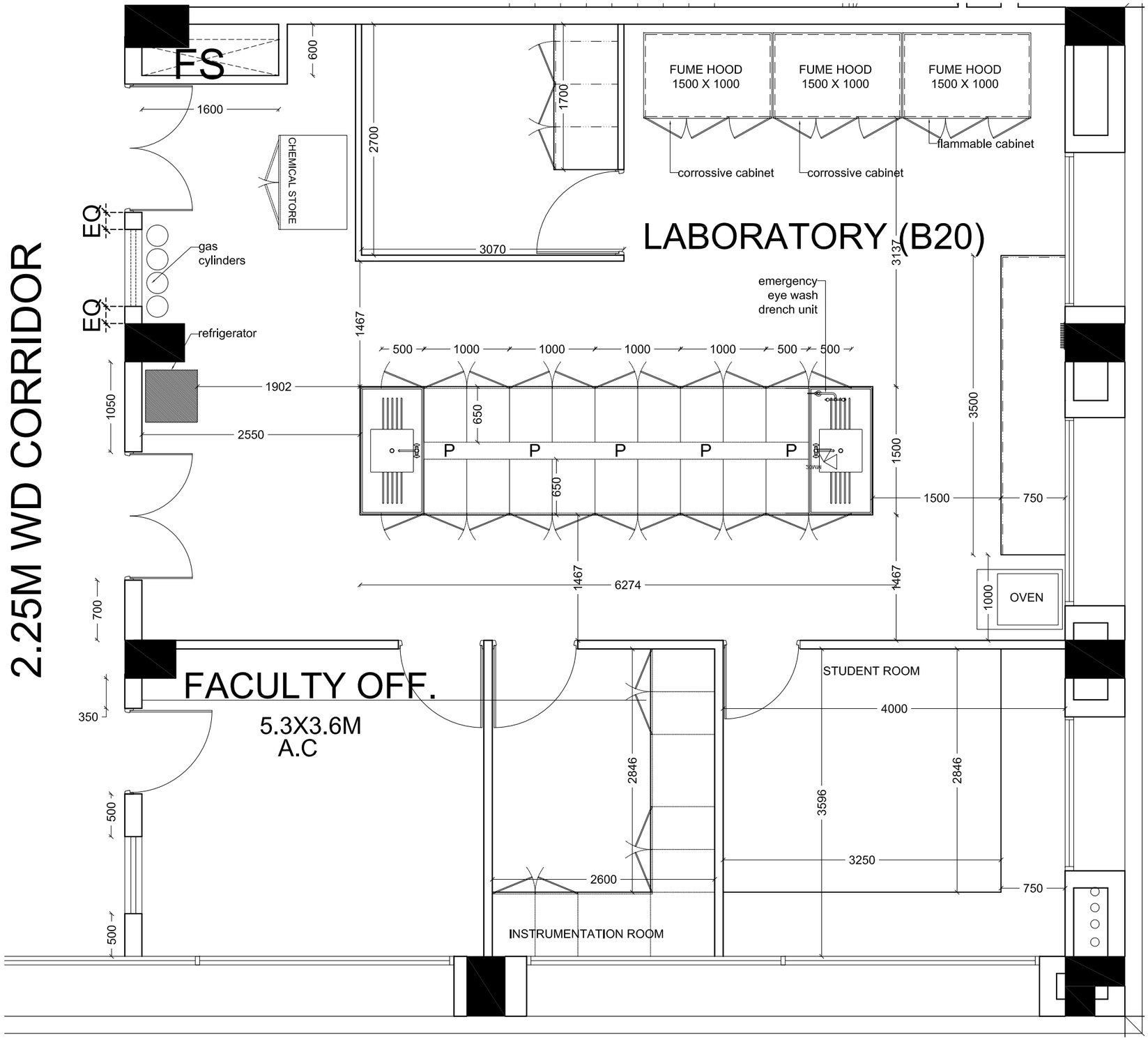
ITEMLIST FOR LAB- B20

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	**total**
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1	3		**3**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1			**0**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			**0**
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			**required**
10	Ducting*	1.9			**required**
11	Inert gas (nitrogen/argon) purification unit	1.7	1		**1**
12	Security belts for gas cylinder		12		**12**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1	1		**1**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2	2		**2**
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3	1		**1**
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4			**0**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3		6	**6**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5	2		**2**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5	10		**10**
20	**Wall table**, Trespa top, **0.75 m depth**	4		9	**9**
21	**Wall Table**, Trespa top, **1.0 m depth**	4			**0**
22	**BWRP Under table** cabinets and drawer combination for **wall table**, **0.5 m wide**	4.4	1		**1**
23	**BWRP Under table cabinet**s and drawer combination for **wall table**, **1.0 m wide**	4.4	4		**4**
24	**Chemical Stoneware sink** with extended worktop having grooves **(1500×750×350)**	3.7	2		**2**
25	**Chemical Stoneware sink** with extended worktop having grooves **(1200×750×350)**	3.7			**0**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)				**0**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5	2		**2**
30	Overhead Cabinet 600×1000×500	6			**0**
31	Safety Eyewasher	4.7	1		**1**
32	Emergency safety shower	7			**0**
33	Student working table	9		8	**8**

Note: *Blowers to be installed.

****Ducting, Island Table and Wall Table- per meter rates should be quoted.***

contd....16



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LAYOUT OF LABORATORY - B20

CHEMICAL SCIENCE DEPARTMENT

REVISION: R6

DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B 20		DATE : 02/06/2014
SCALE : 1:50@A3	*All Dimensions are in **mm***	

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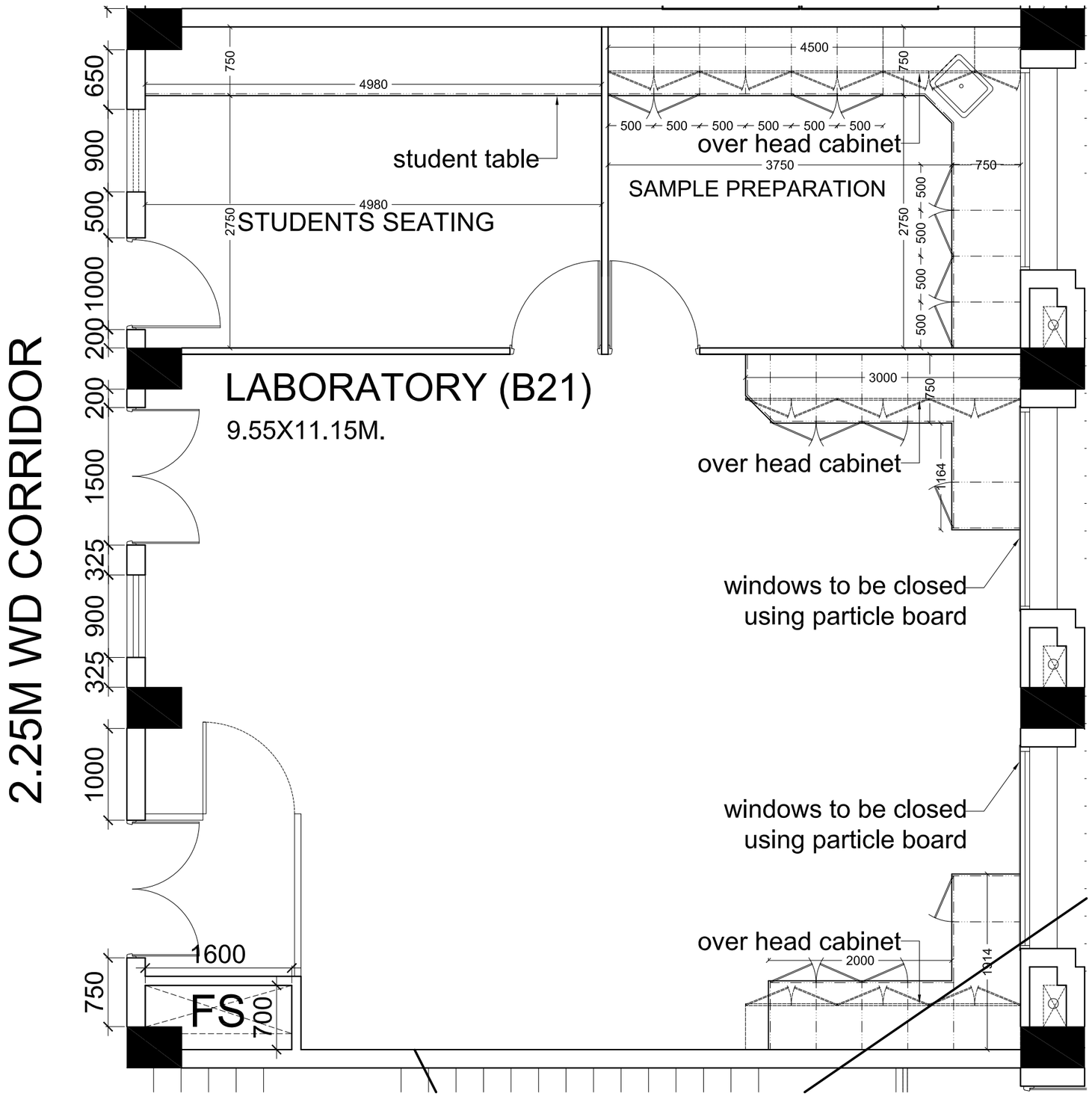
ITEMLIST FOR LAB- B21

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1			**0**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1			**0**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			**0**
10	Ducting*	1.9			**0**
11	Inert gas (nitrogen/argon) purification unit	1.7			**0**
12	Security belts for gas cylinder				**0**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1			**0**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2			**0**
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3			**0**
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4			**0**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3			**0**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5			**0**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5			**0**
20	**Wall table**, Trespa top, **0.75 m depth**	4		16	**16**
21	**Wall Table**, Trespa top, **1.0 m depth**	4			**0**
22	**BWRP Under table** cabinets and drawer combination for **wall table**, **0.5 m wide**	4.4	4		**4**
23	**BWRP Under table cabinet**s and drawer combination for **wall table**, **1.0 m wide**	4.4	6		**6**
24	Chemical Stoneware sink with extended worktop having grooves (1500×750×350)	3.7			**0**
25	Chemical Stoneware sink with extended worktop having grooves (1200×750×350)	3.7			**0**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)		1		**1**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5			**0**
30	Overhead Cabinet 600×1000×500	6	10		**10**
31	Safety Eyewasher	4.7			**0**
32	Emergency safety shower	7			**0**
33	Student working table	9		5	**5**

Note: *Blowers to be installed.

****Ducting, Island Table and Wall Table- per meter rates should be quoted.***

contd.....18



contd.....19

LAYOUT OF LABORATORY - B21

CHEMICAL SCIENCE DEPARTMENT

		REVISION: **R2**
DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B 21		DATE : 02/06/2014
SCALE : 1:50@A3	*All Dimensions are in* ***mm***	

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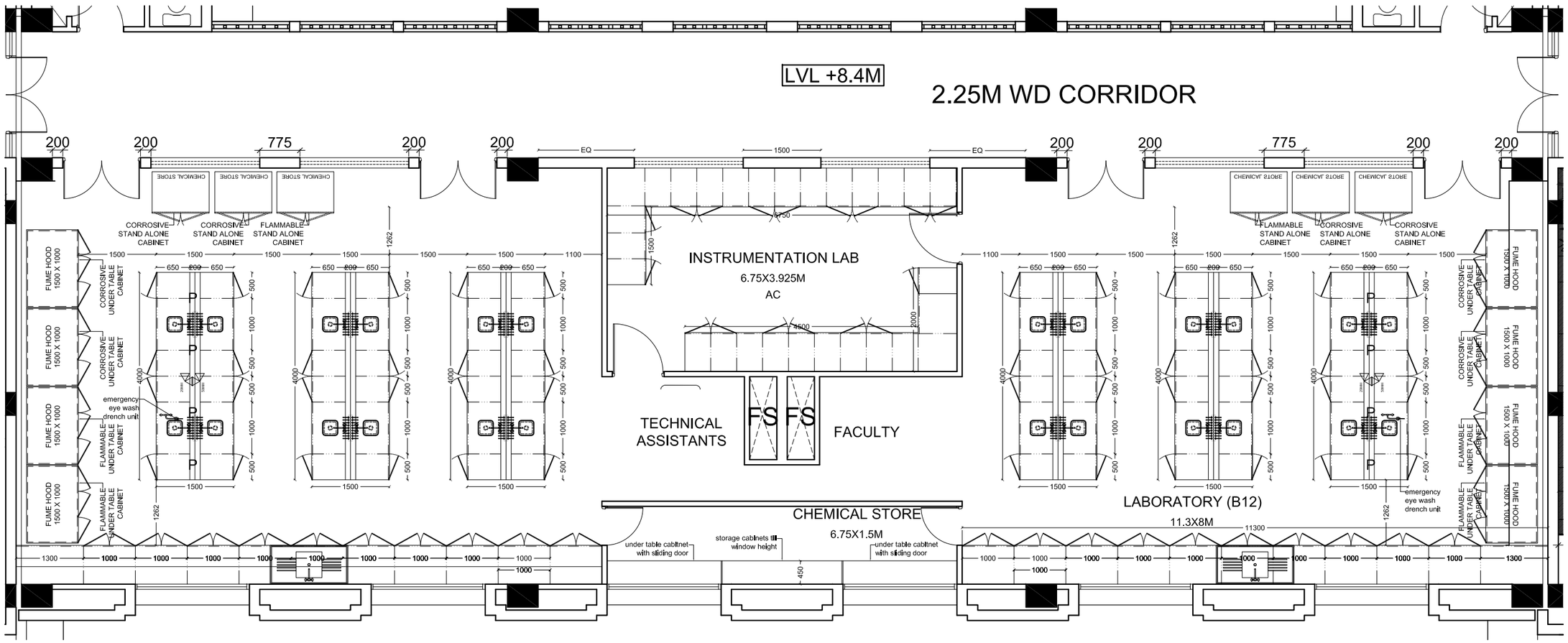
ITEMLIST FOR LAB- B3, B4, B11, B12

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1	16		**16**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1			**0**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			**REQUIRED**
10	Ducting*	1.9			**REQUIRED**
11	Inert gas (nitrogen/argon) purification unit	1.7	4		**4**
12	Security belts for gas cylinder				**0**
13	Under Fume Hood Cabinets for Storage of Flammable Chemicals	2.1	8		**8**
14	Under Fume Hood Cabinets for Storage of Corrosive Chemicals	2.2	8		**8**
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3	4		**4**
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4	8		**8**
17	Island table with reagent racks, Trespa top, 1.5 m depth	3		48	**48**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5	48		**48**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5	24		**24**
20	**Wall table**, Trespa top, **0.75 m depth**	4		70	**70**
21	**Wall Table**, Trespa top, **1.0 m depth**	4			**0**
22	**BWRP Under table** cabinets and drawer combination for wall table, **0.5 m wide**	4.4			**0**
23	**BWRP Under table cabinet**s and drawer combination for wall table, **1.0 m wide**	4.4	30		**30**
24	Chemical Stoneware sink with extended worktop having grooves (1500×750×350)	3.7	4		**4**
25	Chemical Stoneware sink with extended worktop having grooves (1200×750×350)	3.7			**0**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6	48		**48**
27	Polypropylene sink(500×500×350)				**0**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5	48		**48**
30	Overhead Cabinet 600×1000×500	6			**0**
31	Safety Eyewasher	4.7	4		**4**
32	Emergency safety shower	7			**0**
33	Student working table	9			**0**

Note: *Blowers to be installed.

***Ducting, Island Table and Wall Table- per meter rates should be quoted.**

contd....20



contd....21

LAYOUT OF LABORATORY - B3&B4		
CHEMICAL SCIENCE DEPARTMENT		
TEACHING LAB		REVISION: R3
DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B3&B4		DATE : 30/05/2014
SCALE : 1:85@A3	*All Dimensions are in **mm***	

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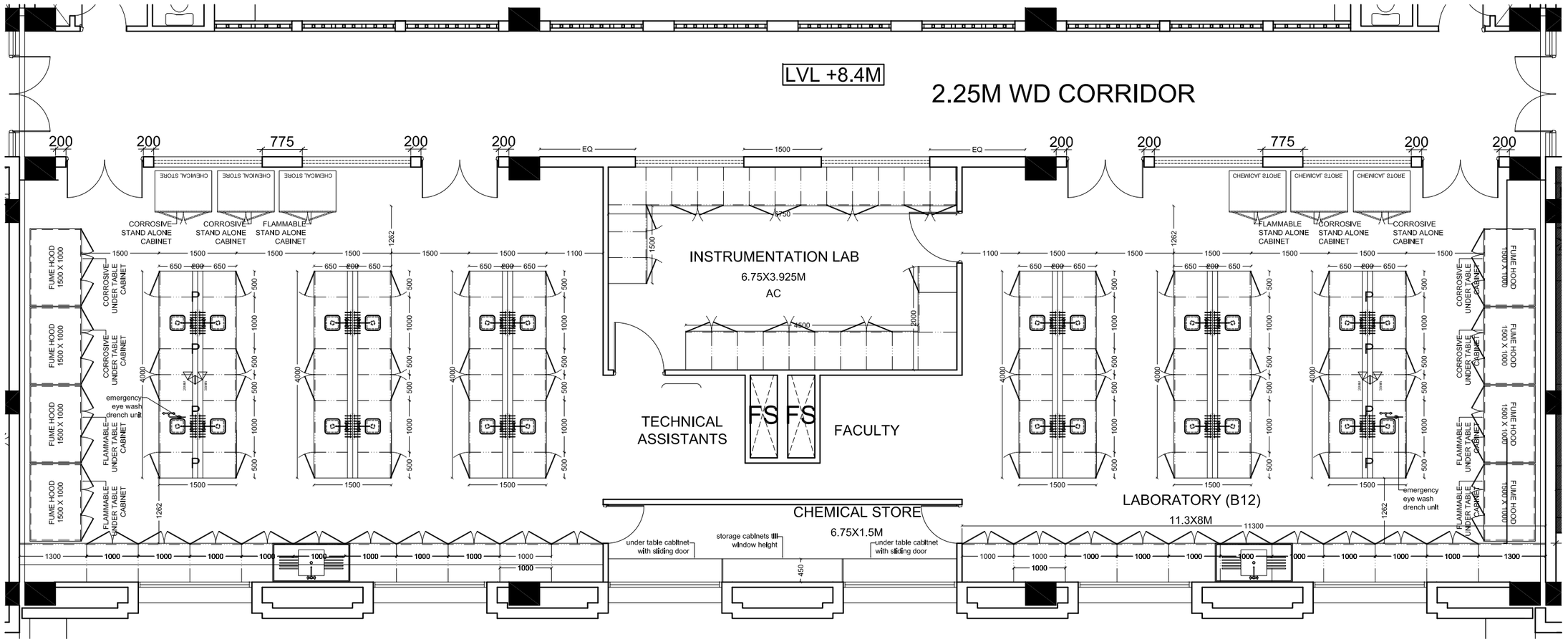

contd...22

LAYOUT OF LABORATORY - B11&B12		
CHEMICAL SCIENCE DEPARTMENT		
TEACHING LAB		REVISION: R3
DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B3&B4		DATE : 30/05/2014
SCALE : 1:85@A3	*All Dimensions are in **mm***	

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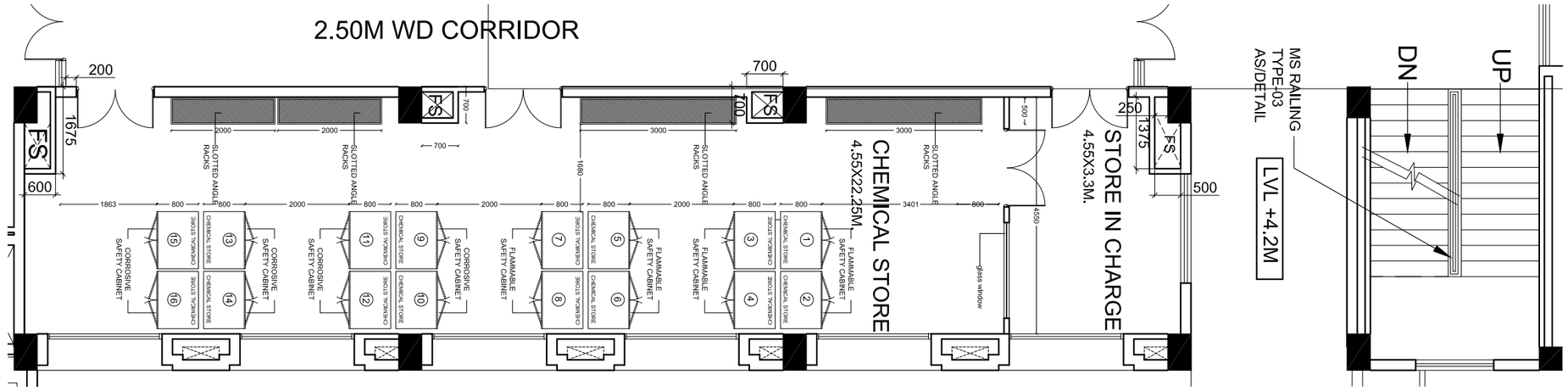
ITEMLIST FOR LAB- CHEMICAL STORE

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1			0
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			0
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1			0
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				0
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				0
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				0
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				0
9	Blower*	1.9			
10	Ducting*	1.9			REQUIRED
11	Inert gas (nitrogen/argon) purification unit	1.7			0
12	Security belts for gas cylinder				0
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1			0
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2			0
15	**Stand-alone** Cabinets for Storage of **Flammable Chemicals**	2.3	8		8
16	**Stand-alone** Cabinets for Storage of **Corrosive Chemicals**	2.4	8		8
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3			0
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5			0
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5			0
20	**Wall table**, Trespa top, **0.75 m depth**	4			0
21	**Wall Table**, Trespa top, **1.0 m depth**	4			0
22	**BWRP Under table** cabinets and drawer combination for **wall table**, **0.5 m wide**	4.4			0
23	**BWRP Under table cabinet**s and drawer combination for **wall table**, **1.0 m wide**	4.4			0
24	Chemical Stoneware sink with extended worktop having grooves (1500×750×350)	3.7			0
25	Chemical Stoneware sink with extended worktop having grooves (1200×750×350)	3.7			0
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			0
27	Polypropylene sink(500×500×350)				0
28	Polypropylene cup sink	4.6			0
29	Peg Board	5			0
30	Overhead Cabinet 600×1000×500	6			0
31	Safety Eyewasher	4.7			0
32	Emergency safety shower	7			0
33	Student working table	9			0

Note: *Blowers to be installed.

****Ducting, Island Table and Wall Table- per meter rates should be quoted.***

contd....23



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LAYOUT OF CHEMICAL STORE AT +1 LVL		
CHEMICAL STORE		
CHEMICAL STORE		**REVISION:** R2
DRAWN :	**CHECKED:**	**APPROVED:**
DWG No.: IISER-T/LL/CSD-B S3 & S4		**DATE :** 30/05/2014
SCALE : 1:50@A3	*All Dimensions are in* ***mm***	

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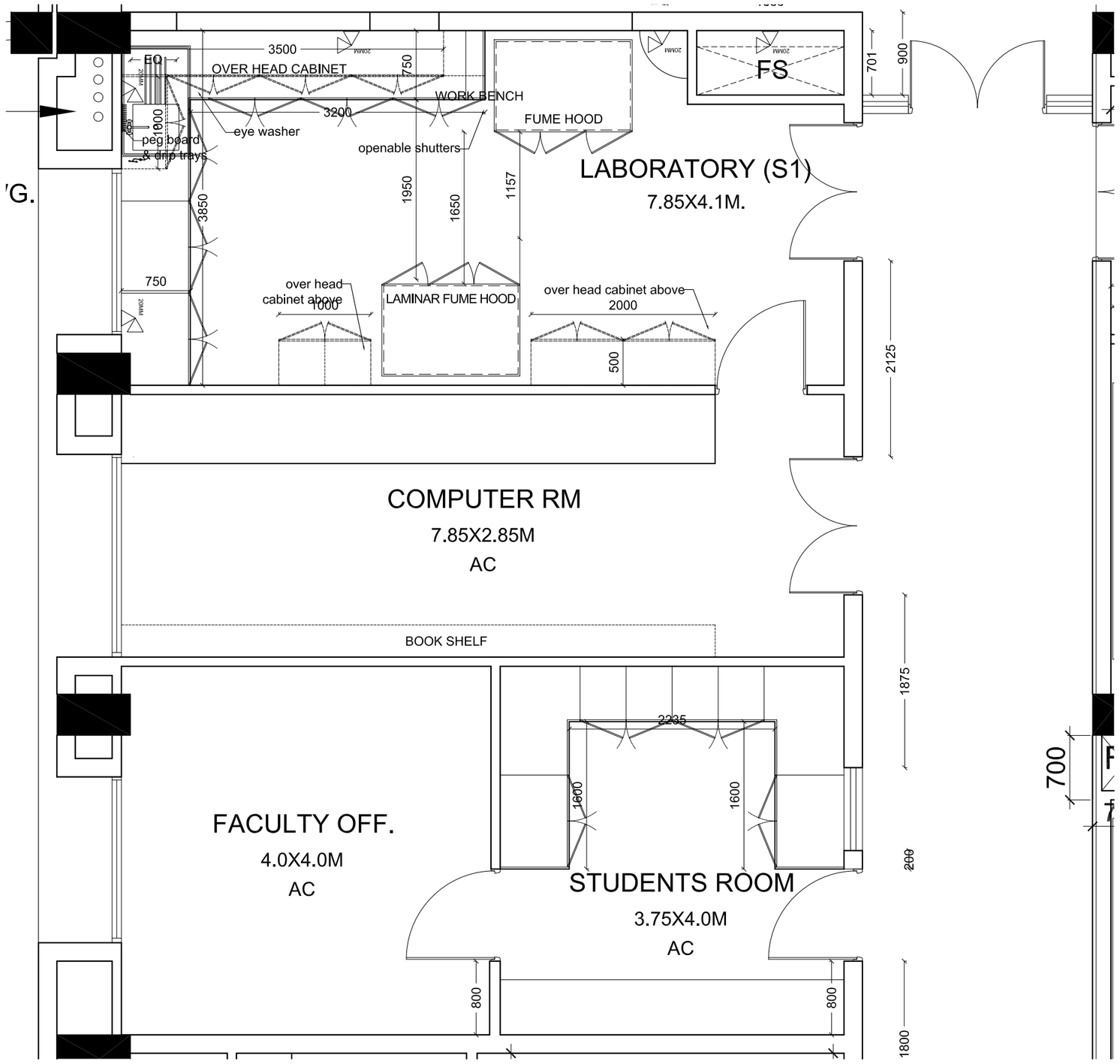
ITEMLIST FOR LAB- S1

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1	1		**1**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1			**0**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			**REQUIRED**
10	Ducting*	1.9			**REQUIRED**
11	Inert gas (nitrogen/argon) purification unit	1.7	1		**1**
12	Security belts for gas cylinder				**0**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1	1		**1**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2			**0**
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3			**0**
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4			**0**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3			**0**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5			**0**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5			**0**
20	**Wall table**, Trespa top, **0.75 m depth**	4		7	**7**
21	**Wall Table**, Trespa top, **1.0 m depth**	4			**0**
22	**BWRP Under table** cabinets and drawer combination for **wall table**, **0.5 m wide**	4.4	0		**0**
23	**BWRP Under table cabinet**s and drawer combination for **wall table**, **1.0 m wide**	4.4	10		**10**
24	Chemical Stoneware sink with extended worktop having grooves (1500×750×350)	3.7			**0**
25	Chemical Stoneware sink with extended worktop having grooves (1200×750×350)	3.7	1		**1**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)				**0**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5	1		**1**
30	Overhead Cabinet 600×1000×500	6	7		**7**
31	Safety Eyewasher	4.7	1		**1**
32	Emergency safety shower	7			**0**
33	Student working table	9			**0**

Note: *Blowers to be installed.

***Ducting, Island Table and Wall Table- per meter rates should be quoted.**

contd....25



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LAYOUT OF LABORATORY - S1

CHEMICAL SCIENCE DEPARTMENT

		REVISION: R7
DRAWN :	**CHECKED:**	**APPROVED:**
DWG No.: IISER-T/LL/CSD-S1		**DATE :** 30/05/2014
SCALE : 1:50@A3	*All Dimensions are in **mm***	

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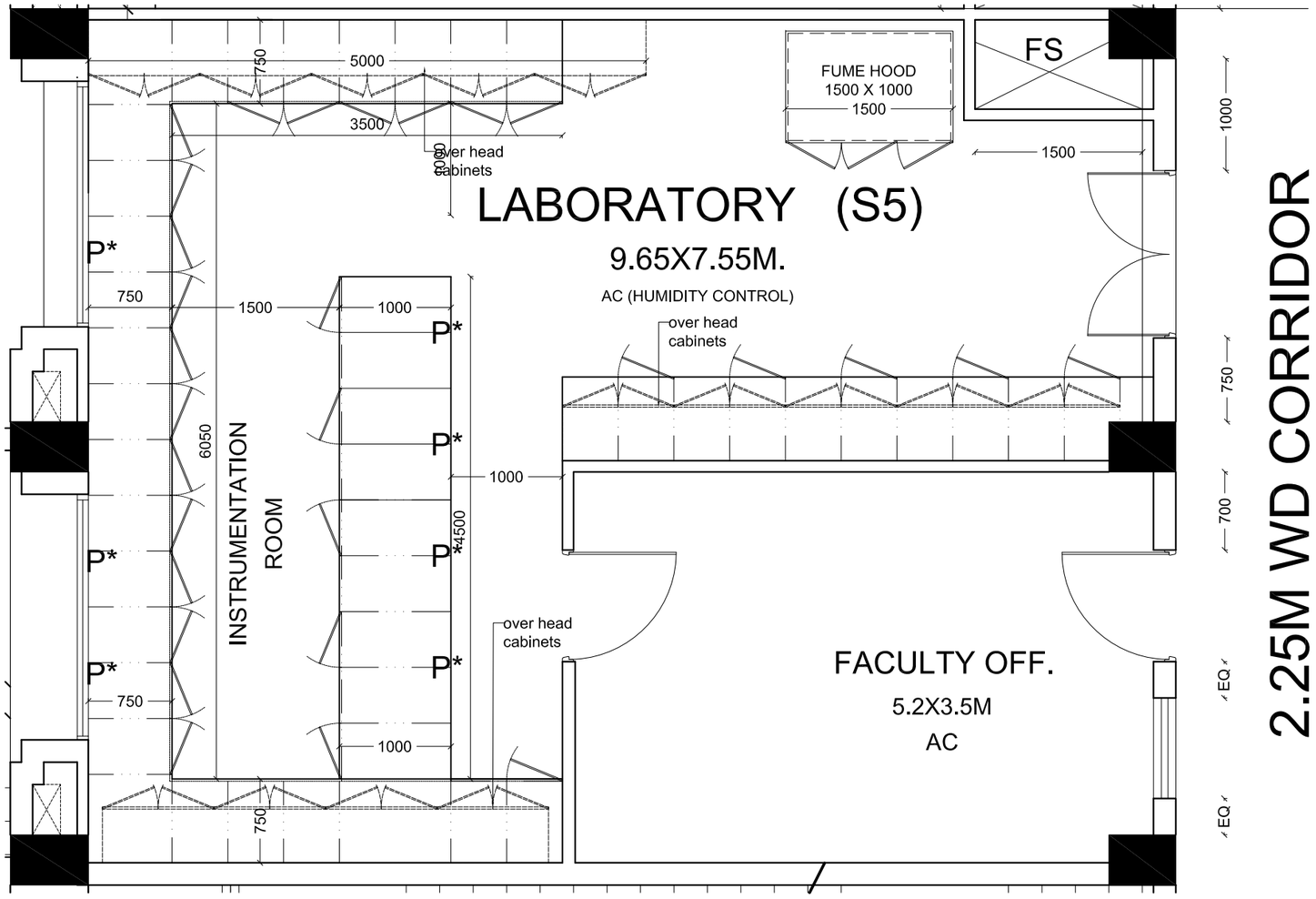
ITEMLIST FOR LAB- S5

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	Toal Quantity
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1			**0**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1	1		**1**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	*Blower	1.9			**REQUIRED**
10	*Ducting	1.9			**REQUIRED**
11	Inert gas (nitrogen/argon) purification unit	1.7	1		**1**
12	Security belts for gas cylinder		2		**2**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1	1		**1**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2			**0**
15	Stand-alone Cabinets for Storage of Flammable Chemicals	2.3			**0**
16	Stand-alone Cabinets for Storage of Corrosive Chemicals	2.4			**0**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3			**0**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5	4		**4**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5			**0**
20	**Wall table**, Trespa top, **0.75 m depth**	4		14	**14**
21	**Wall Table**, Trespa top, **1.0 m depth**	4		5	**5**
22	**BWRP Under table** cabinets and drawer combination for **wall table**, **0.5 m wide**	4.4	12		**12**
23	**BWRP Under table cabinet**s and drawer combination for **wall table**, **1.0 m wide**	4.4	9		**9**
24	Chemical Stoneware sink with extended worktop having grooves (1500×750×350)	3.7			**0**
25	Chemical Stoneware sink with extended worktop having grooves (1200×750×350)	3.7			**0**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)				**0**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5			**0**
30	Overhead Cabinet 600×1000×500	6	14		**14**
31	Safety Eyewasher	4.7			**0**
32	Emergency safety shower	7			**0**
33	Student working table	9		5	**5**

Note: *Blowers to be installed.

***Ducting, Island Table and Wall Table- per meter rates should be quoted.**

contd...27



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LAYOUT OF LABORATORY - S5

CHEMICAL SCIENCE DEPARTMENT

		REVISION: R6
DRAWN :	**CHECKED:**	**APPROVED:**
DWG No.: IISER-T/LL/CSD-S5, R2		**DATE :** 09/06/2014
SCALE : 1:50@A3	*All Dimensions are in **mm***	

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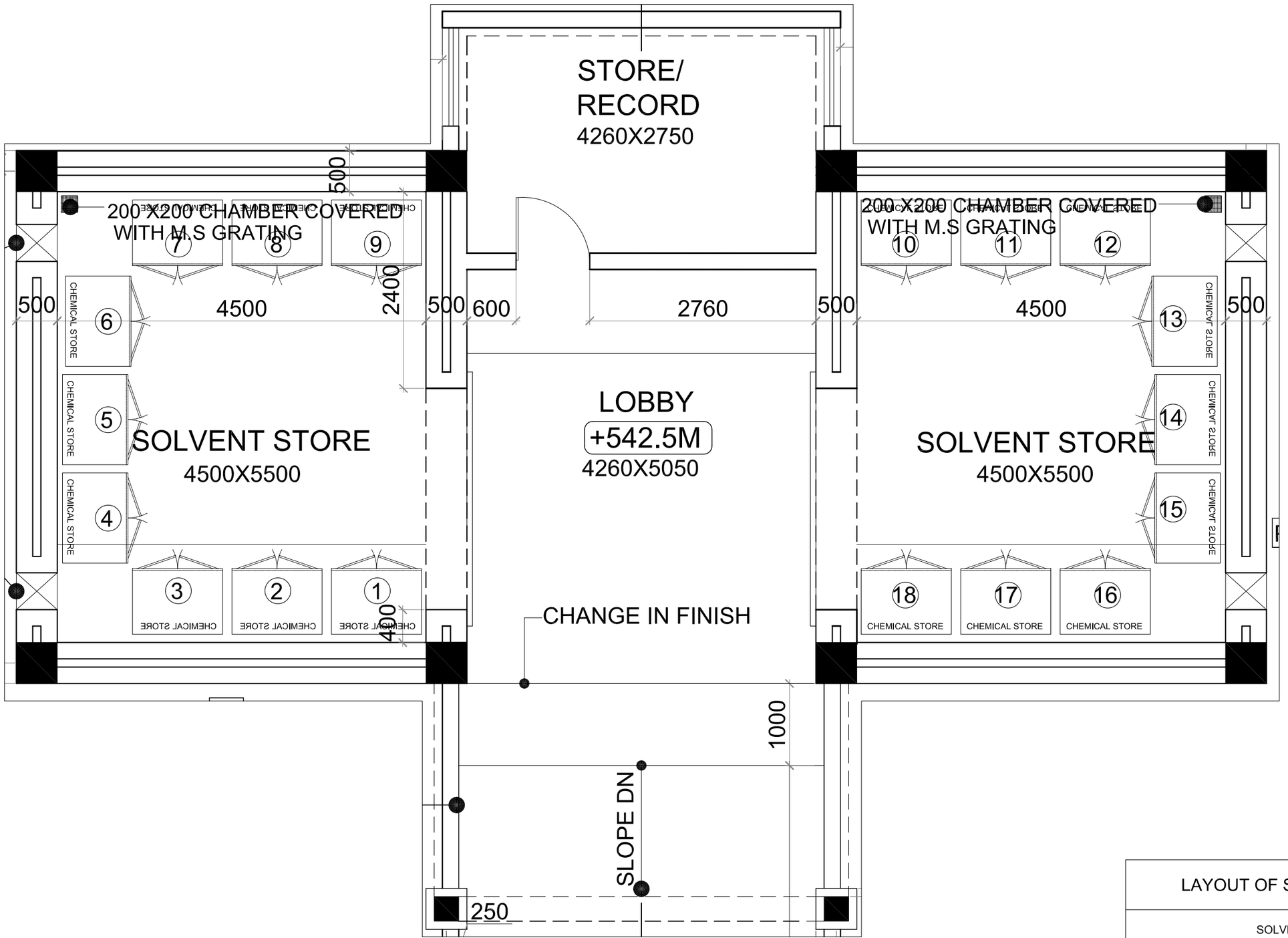
ITEMLIST FOR LAB- SOLVENT STORE

Item No	Item	Reference No.**	Quantity in No's	Quantity in meter	
1	Constant Air Volume (CAV) – By-Pass Hood, 1.5 m width	1			**0**
2	Constant Air Volume (CAV) – By-Pass Hood, 2.0 m width	1			**0**
3	Variable Air Velocity (VAV) Hood, 1.5 m width	1			**0**
4	Variable Air Velocity (VAV) Hood, 2.0 m width	1			
5	Low Floor Solvent Distillation Fume Hood (CAV) 1.5 m width				**0**
6	Low Floor Solvent Distillation Fume Hood (CAV) 2.0 m width				**0**
7	Low Floor Solvent Distillation Fume Hood (VAV) 1.5 m width				**0**
8	Low Floor Solvent Distillation Fume Hood (VAV) 2.0 m width				**0**
9	Blower*	1.9			
10	Ducting*	1.9			**REQUIRED**
11	Inert gas (nitrogen/argon) purification unit	1.7			**0**
12	Security belts for gas cylinder				**0**
13	Under Fume Hood Cabinets for Storage of **Flammable Chemicals**	2.1			**0**
14	Under Fume Hood Cabinets for Storage of **Corrosive Chemicals**	2.2			**0**
15	Stand-alone Cabinets for Storage of **Flammable Chemicals**	2.3	15		**15**
16	Stand-alone Cabinets for Storage of **Corrosive Chemicals**	2.4	3		**3**
17	**Island table** with reagent racks, Trespa top, **1.5 m depth**	3			**0**
18	**BWRP Under table cabinet** and drawer combination for island table, **0.5 m wide**	3.5			**0**
19	**BWRP Under table cabinet** and drawer combination for island table, **1.0 m wide**	3.5			**0**
20	**Wall table**, Trespa top, **0.75 m depth**	4			**0**
21	**Wall Table**, Trespa top, **1.0 m depth**	4			**0**
22	**BWRP Under table cabinets** and drawer combination for wall table, **0.5 m wide**	4.4			**0**
23	**BWRP Under table cabinets** and drawer combination for wall table, **1.0 m wide**	4.4			**0**
24	**Chemical Stoneware sink** with extended worktop having grooves **(1500×750×350)**	3.7			**0**
25	**Chemical Stoneware sink** with extended worktop having grooves **(1200×750×350)**	3.7			**0**
26	On Top Mounting Type Chemical Stoneware Sink (300×300×250)	4.6			**0**
27	Polypropylene sink(500×500×350)				**0**
28	Polypropylene cup sink	4.6			**0**
29	Peg Board	5			**0**
30	Overhead Cabinet 600×1000×500	6			**0**
31	Safety Eyewasher	4.7			**0**
32	Emergency safety shower	7			**0**
33	Student working table	9			**0**

Note: *Blowers to be installed.

***Ducting, Island Table and Wall Table- per meter rates should be quoted.**

contd.....29



DR [F&A]
ADDL. CHARGE [P&S]

LAYOUT OF SOLVENT STORE		
SOLVENT STORE		
		REVISION: R0
DRAWN :	CHECKED:	APPROVED:
DWG No.: IISER-T/LL/CSD-B S3 & S4		DATE : 02/06/2014
SCALE : 1:50@A3	*All Dimensions are in **mm***	

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