

# DDA CABINET WITH AV ALARM

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# DDA CABINET WITH AV ALARM

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- Pengenalan
- Skop kerja
- Spesifikasi Teknikal
- T&C



# DDA CABINET – Technical Spec

- Constructed – cold rolled steel shelf
- Finishing - hard epoxy powder coating
- Indicator Light
- Eletrical buzzer



# DDA CABINET – Technical Spec

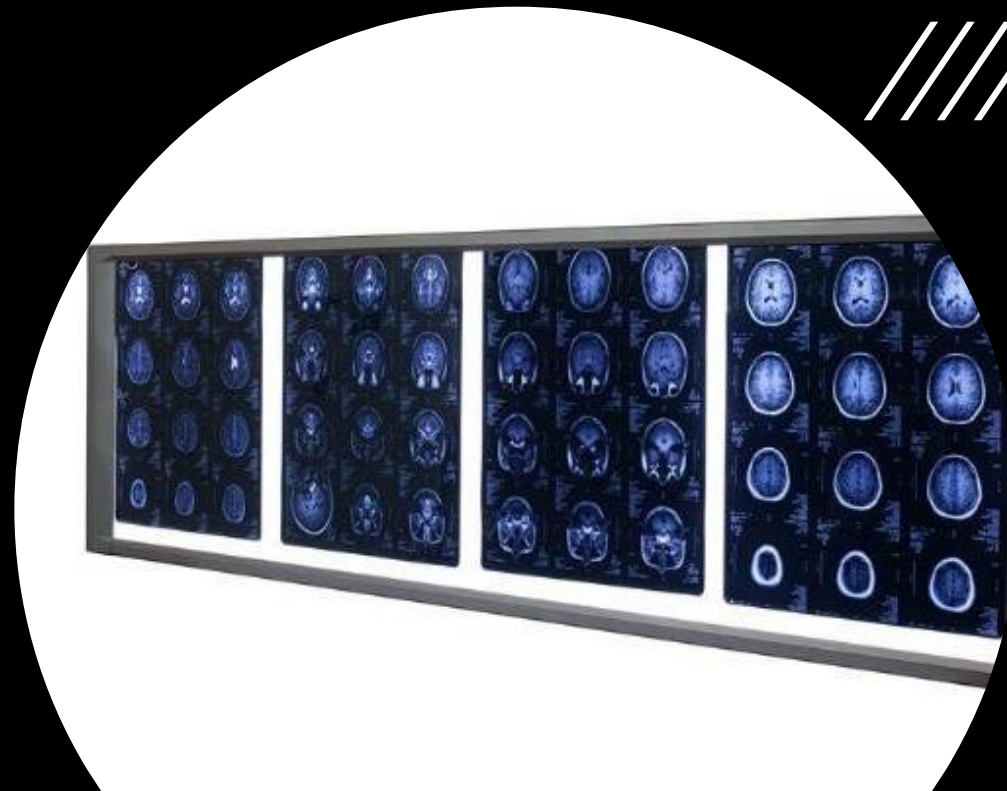
## Wall mounted DDA Cabinet

- 715mm (W)
- 200mm(D)
- 760mm(H)

## Floor Standing DDA Cabinet

- 1422mm (W)
- 600mm (D)
- 1800 mm(H)

# X-RAY VIEWER



# X-RAY VIEWER

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- Pengenalan
- Skop kerja
- Spesifikasi Teknikal
- Ujisaksi Kilang dan T&C
- DLP



## X-RAY VIEWER – Tech Spec



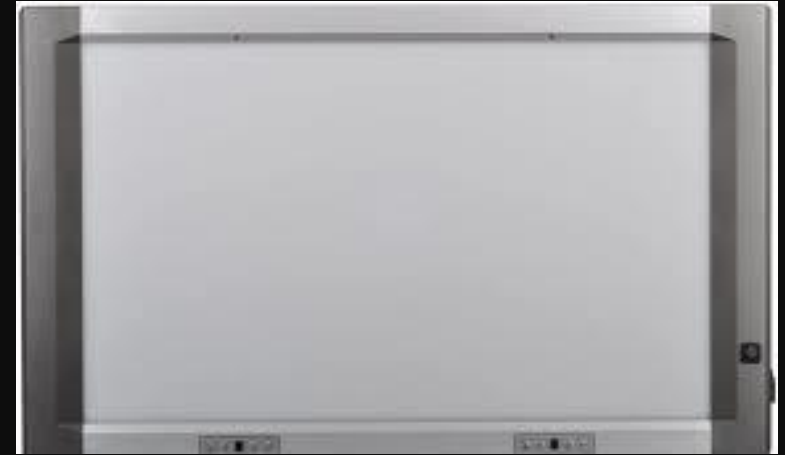
- Shall be slim and compact
- Automatic on/off with film insertion
- Supply –direct terminated
- Uniform illumination with brightness adjustable
- Minimum luminance  $>1500 \text{ cd/m}^2$
- Minimum colour temperature  $>5000\text{K}$



# X-RAY VIEWER – Type of X-Ray Viewer

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- X-Ray viewer single type
- X-Ray viewer double type
- X-Ray viewer 4 in 1 type





# X-RAY VIEWER – Coordination at Site

- Information on installation NSC /Maincon
- 4 Wall drwg
- Direct termination supply
- Mock up





## X-RAY VIEWER – Manufacturer Inspection


- Before delivery to site
- In house project – must include in BQ
- To allow cost for FAT including transport, food, accommodation, testing manual, handbook for 4 person.
- Before FAT – method testing
- After FAT – record and result certified by manufacturer, SO



## X-RAY VIEWER – Testing & Commissioning

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- To prepare list of xray viewer installed
- To prepare list of testing method
- No test shall be carried out without SO approval
- All result shall be recorded and submitted to JKR
- Repeat Testing
  - Once failure occurred



## X-RAY VIEWER – Operation, Manual and Maintenance

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- As installed drawing
- All Testing Result complete with endorsement
- Warranty Cert from manufacturer
- List of PPM



# X-RAY VIEWER — During Defect Liability Period

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- Any defect or faulty to be adjust and rectify
- The client should fill up defect form
- Warranty only during DLP



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# OT Panel

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# OT PANEL

- Pengenalan
- Skop kerja
- Spesifikasi Teknikal
- T&C
- DLP



# OT PANEL – Tech Spec

- Shall be made from stainless steel grade 316
- 2mm thickness with hairline finish
- Tiled plate shall be engraved lettering to identify component
- Dimension shall be accommodate to all services required
- All wiring and design shall comply with HTM 2007, HTM 2020 and HTM 2021
- OT panel can be front or rear accessed type
  - 1<sup>st</sup> fix wall box (back box) shall be mild steel



- 4 in 1 LED X-Ray Viewer
- Digital Time –elapsed clock
- Digital/Analog – time of day clock
- General Lighting switch
- OT Operation and X-Ray Warning light switch if required
- OT Light – monitor and control
- IPS – Remote Alarm Indicator
- Intercom System
- Hands free type Telephone
- Nurse Call Sys – Code Blue
- Tie line or Aux jack for OT camera sys
- SSO – 4 ess , 4 ups
- Earth stud
- Data Point

## Component of OT Panel

- **Mechanica services**
  - Medical Gas Alarm Panel
  - AGSS Switch
  - Indicator Room Temperature
  - Indicator Room Pressure
  - Indicator Room Humidity
  - Fire Alarm indicator

# Technical Specification Adherence (TSA)

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Event for selection of brand that been agreed in the contract .  
Normally in D&B projects contractor will offer 3 brands.

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This pre equipment procurement process before equipment  
procument.

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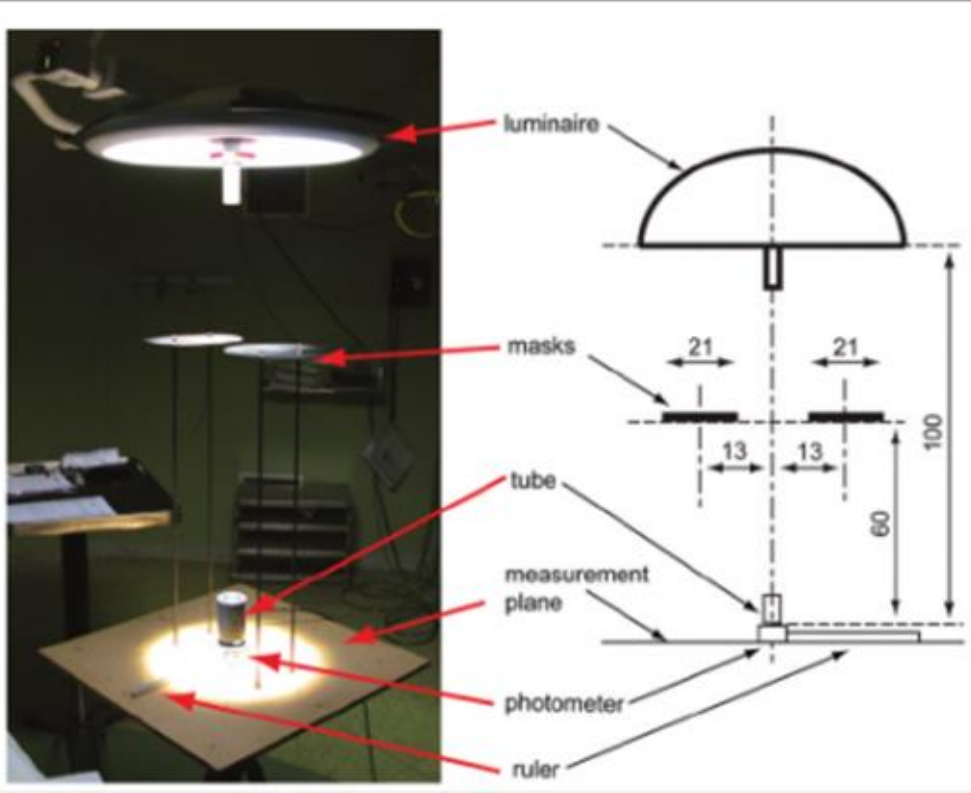
TSA shall be done before progress up to 60% which to considering  
planning of procument , purchasing, delivery and installation at the  
right time on work program. – PD role and responsibilities.

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# Technical Specification Adherence

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- By working on work program, the contractor shall planning an activities for approval for equipment .
  - Propose the formatting for submission documentation of brand
  - Ready the documentation
  - Setting up committee for that TSA,
  - Event scheduling for committee meeting complete with the demostation or preparing the full presentation to convince the committee.
  - Minute of the decision of meeting
  - Contactor is allowed to make procurement and purchasing the item after complete TSA minute had been made officially.



# Testing & Commissioning

**TEST INSTRUMENTS**

**TEST AND TEST CERTIFICATES**

**USER TRAINING**

**CHECKING AND COUNTING**

## TEST INSTRUMENTS

- Shall be regularly tested and calibrated by the manufacturers or accredited calibration laboratories for their functionality and accuracy.
- Test and Calibration Reports or Certificates for the measuring and test instruments issued by the calibration laboratory shall be valid for two (2) years from the date of issuance.

## TEST AND TEST CERTIFICATES

- Cables shall be tested for continuity
- Functional test to indicate correct operation and performance of all equipment
- Any other tests which may be needed to demonstrate the satisfactory function of the system.

## User Training

- Shall be arranged and conducted for all system and equipment.
- The medical and technical personnel shall be trained on the correct operation of the equipment that include the mechanical and electrical aspects as well as quality assurance of the machine.

## CHECKING AND COUNTING

- Inventory Checking and Counting

**OPERATION AND  
MANUAL  
DOCUMENTATION**

- a. Manufacturer's Catalogues And As Built Drawings**
- b. Manufacturer's Recommendation PPM**
- c. Guarantee & Warranty**
- d. Certificate of Testing and Commissioning**
- e. Spare Part List of Recommendation**
- f. Supplier Contact No.**
- g. All Testing Result**

# DEFECT LIABILITY PERIOD

- the contractor shall be responsible for the service and maintenance work of the complete installation.
- All labour, material, tools and parts necessary to rectify the defect due to manufacturing/installation faults shall be supplied/executed at the Contractor's cost.
- The service and maintenance to be carried out, defects to be rectified and making good shall include but not limited to the following:
  - ❖ Repairs and replacement of all equipment and accessories that become faulty due to manufacturing and installation defects whether it is under the manufacturer's warranty or not.
  - ❖ Replacement and making good of all wiring and accessories.
  - ❖ Making good any damage to roads, buildings, drains, cables, pipes, concrete areas, paved areas etc. which had not been properly made good arising out of his work:
  - ❖ All other works deemed as necessary by the S.O or S.O's Representative.