SPECIFICATIONS OF LEAD GLASS WINDOW

(A) <u>LEAD GLASS WINDOW DATA</u>

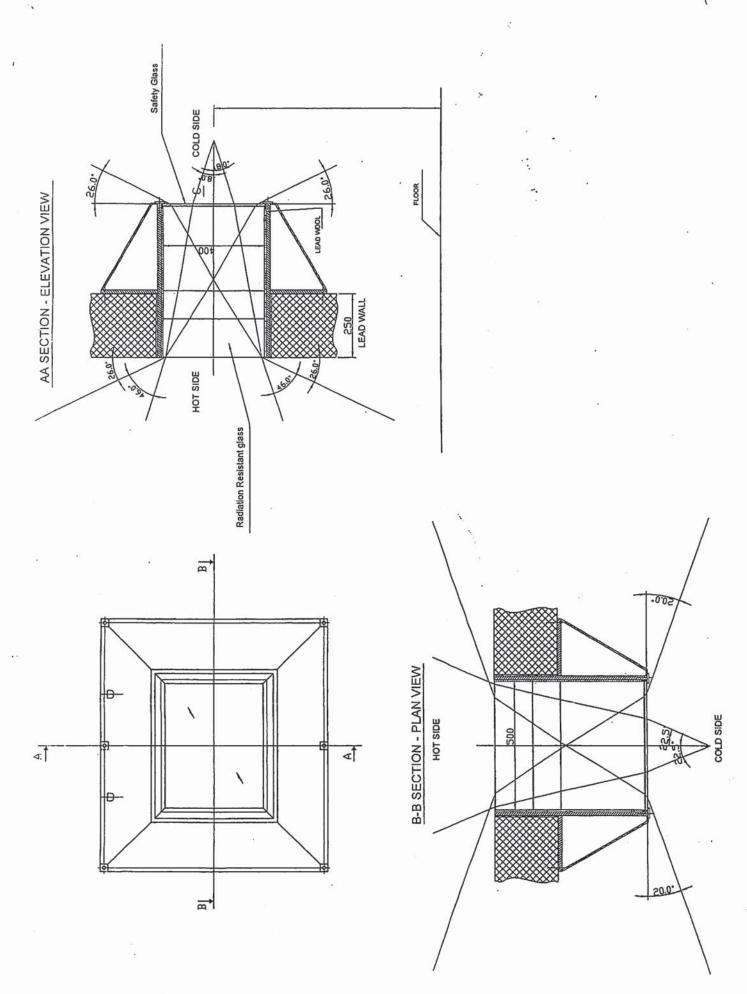
| Sr. No | Description | Data > |
|--------|----------------------------------------------------|----------------------------------------------------------------|
| 01 | Window Type | Dry Lead Glass |
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| 03 | Hot cell dimensions | 1500x1200x1600 mm (L x W x H) |
| 04 | Wall thickness of cell | 250 mm Lead of density 11.1g/cm ³ |
| 05 | Lead glass | Density 5.2 g/cm ³ |
| 06 | Radiation resistant glass on hot side | Density 3.3 g/cm ³ |
| 07 | Safety glass on cold side | Density 2.5 g/cm ³ |
| 08 | Refractive Index | 1.8 |
| 09 | Average distance from source to hot side of window | 600 mm |
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| | | D CDII CIII |
| 14 | Chemicals inside cell | Fumes of Dilute Sulphuric Acid, Concentrated Nitric Acid. |
| 15 | Temperature Range inside cell | 15-25 C ⁰ |
| 16 | Negative Pressure inside cell | 250-500 Pascal |
| 17 | Relative Humidity inside cell | 45-60% |
| 18 | Leakage Rate | Whole window assembly Leake Proof with no Radiation Streaming. |
| 19 | Lead Equivalence | 250 mm Lead(Pb) |
| 20 | Window clear view | 500mm x 400mm (Horizontal x Vertical) |
| 21 | Design life | 30 Year |
| 22 | Duty cycle | Continuous |
| 23 | Lead Glass Window Frame | Drawing attached (Annexure "C") |
| 24 | Hot side trim frame assembly required | Yes |
| 25 | Frame material | Stainless steel |
| 26 | Code and Standard | ASTM 1572 - 04 |

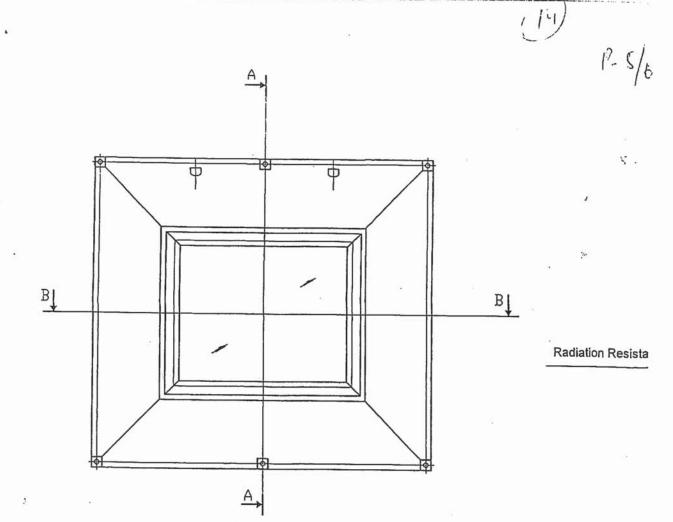
(B) TERMS AND CONDITIONS

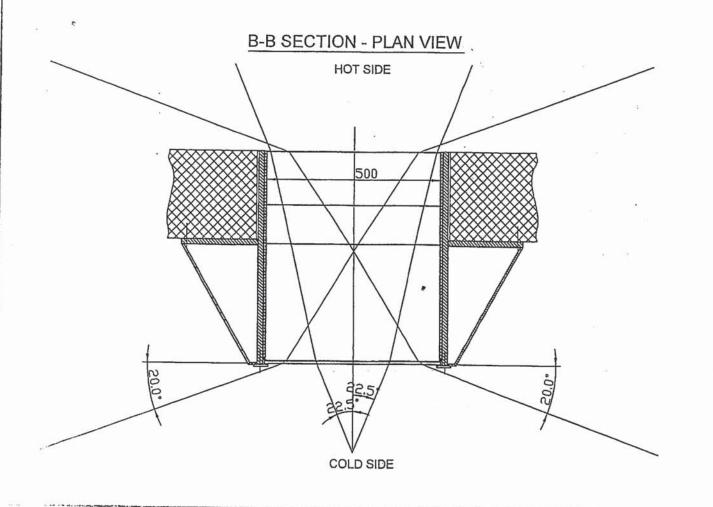
- 1) Lead Glass shall comply with wall thickness regarding shielding.
- Glasses provided shall be free of bubbles, inclusions and there shall not be any visual defects in the central viewing area.
- Glass surfaces shall be anti- reflective treated to meet light transmission requirement.
- 4) Cerium -stabilized glass shall be utilized to eliminate browning.
- 5) Lead wool may be used inside a window assembly housing to fill void between the edges of glass slabs and window housing to eliminate radiation path.
- 6) It is important that Window frame shall be of a single step and shall be constructed of stainless steel.
- 7) Detail drawing of frame shall be prepared by manufacturer and submitted to client for approval.
- 8) Manufacturer shall prepare manufacturing plan, inspection plan, test plan, acceptance test procedure, quality assurance procedure and shipping procedure.
- 9) Manufacturer shall provide material safety data sheet (MSDS) and certified material test report (CMTR), that certifies the results of tests performed on the item provided.

(C) TESTING AND INSPECTION

- 1) All testing certification will be the responsibility of the manufacturer, especially the lead equivalence certificate.
- 2) Wall liner/window frame shall pass a leak test.
- 3) Each glass slab shall be inspected visually for cracks, bubbles, dimensions and density.
- 4) Light transmission of each glass slabs shall be inspected.
- 5) After installing the glasses, the whole window assembly shall pass a test for over all leak.
- 6) Inspection shall be carried out by owner's personals at manufacturers' site.







AA SECTION - ELEVATION VIEW

