

**DOCTOR JL DUBE DRIVE
INANDA
KWAZULU NATAL
SOUTH AFRICA
29°41'50.43"S 30°57'25.**

This architectural section drawing illustrates a circular building with a large, open central hall. A prominent curved walkway or ramp, supported by a series of vertical columns, winds through the interior space. The drawing uses fine lines to represent structural elements and hatching to indicate different materials or levels. The building is shown in relation to its surrounding terrain, which is depicted with contour lines.


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- 10. CONCRETE FLOOR SLABS OR ROOF SLABS LAID ON MASONRY WALLS**
- CONCRETE FLOOR SLABS OR ROOF SLABS SHALL BE CONSTRUCTED AS FOLLOWS:
- BEAR FLOOR SLABS IN HOLLOW UNIT CONSTRUCTION ON LITTEL BLOCKS OR BOND BLOCKS REINFORCED WITH A SINGLE 16mm DIAMETER STEEL ROD.
 - IN SOLID UNIT CONSTRUCTION, THE TWO BED JOINTS IMMEDIATELY BELOW CONCRETE SLABS, SHALL BE REINFORCED WITH A SINGLE 5.6mm OR 6mm DIAMETER ROD.
- SUPPLY SLABS SHALL BE PROVIDED BETWEEN MASONRY WALLS AND CONCRETE SLABS AND BEAMS BY LEVELLING UP AND TROWELLING SMOOTH THE BEARING SURFACES OF MASONRY WITH MORTAR THAT COMPRISES THREE PARTS OF ONE PART CEMENT AND TWO PARTS OF SAND. THE BEARING AREA WITH TWO LAYERS OF 0.25mm PLYOESTER SHEETING, OR A PROPRIETARY, BEARING STRIP CAPABLE OF WITHSTANDING THIS MASS SHALL BE NOT LESS THAN 15mm.
- THE ENDS AND SIDES OF PRECAST AND CAST IN SITU CONCRETE BEAMS AND SLABS LAID ON MASONRY WALLS SHALL BE SEPARATED FROM THE MASONRY BY MEANS OF CLOSED CELL JOINTING MATERIAL, POLYETHYLENE OR POLYURETHANE, THAT IS 15mm THICK.
- CONCRETE FLOOR SLABS AND 15mm FOR ROOF SLABS.
- SUPPLY JOINTS THAT COMPRSE TWO LAYERS OF 0.25mm PLYOESTER SHEETING AND BEARING STRIP SHALL BE ON SLABS, BENEATH THE MASONRY, AND TURNED UP TO BREAK CONTACT BETWEEN ANY SCREED OR TOPPING AND THE MASONRY.

- ## 3. WALL TIES
- LEAVES IN COLLAR JOINTED WALLS TO BE CONNECTED TO EACH OTHER BY MEANS OF WIRE TIES.
 - CRIMP WIRE TIES SHALL BE PROVIDED IN COLLAR JOINTED WALLS AT VERTICAL CENTRES NOT EXCEEDING 450mm.
 - BUTTERFLY & MODIFIED PWD TIES SHALL BE PROVIDED IN CAVITY WALLS AT VERTICAL CENTRES NOT EXCEEDING 450mm AT ALL HORIZONTAL CENTRES NOT EXCEEDING 600mm. TIES TO BE UNIFORMLY STAGGERED.
 - ADDITIONAL TIES TO BE PROVIDED IN CAVITY WALLS AT VERTICAL CENTRES NOT EXCEEDING 450mm AT ALL HORIZONTAL CENTRES NOT EXCEEDING 150mm OF THE EDGES OF ALL OPENINGS & MOVEMENT/ CONTROL JOINTS AND WHERE A LEAF INTERSECTS WITH ANOTHER WALL.
- ## 8. CAVITY WALLS
- THE CAVITY WIDTH OF A CAVITY WALL SHALL NOT BE LESS THAN 50mm.
 - FORM TIE HOLES IN THE OUTER LEAF OF WALLING AT INTERVALS THAT DO NOT EXCEED 1000mm AND IMMEDIATELY ABOVE DAMP PROOF COURSE BY LEAVING PERPEND JOINTS OPEN FOR A HEIGHT OF APPROXIMATELY 50mm OR PROVIDING OPENINGS APPROXIMATELY 30mm WIDE IN THE SHELL BEDDING OF HOLLOW UNITS.
 - PREVENT TRANSMISSION OF MOISTURE WHERE DUCTS , SLEEVES OR PIPES ARE LAID ACROSS A CAVITY.
 - KEEP THE CAVITY FREE OF MORTAR & DEBRIS DURING CONSTRUCTION. CLEAN MORTAR DROPPINGS ON TIES.
 - REMOVE MORTAR DROPPINGS REACHING THE BASE OF THE CAVITY DAILY THROUGH TEMPORARY OPENINGS. DO NOT DAMAGE THE DAMP-PROOF COURSE MEMBRANE WHILST CLEANING THE CAVITY.
 - DAMP-PROOF COURSES SHALL BE PROVIDED ABOVE ALL WINDOW AND DOOR OPENINGS IN CAVITY WALL CONSTRUCTION UNLESS:
 - ROOF OVERHANGS OF 750mm OR MORE ARE PROVIDED AND
 - THE DISTANCE BETWEEN THE WALL PLATE AND THE TOP OF WINDOW OR DOOR FRAME (OR BOTH) DOES NOT EXCEED 700mm
 - HORIZONTAL DAMP-PROOF COURSES SHALL BE LAID WITH MORTAR ABOVE AND BELOW
 - LAY DPC TO THE FULL THICKNESS OF THE WALL AND LAY AT LEAST 150mm at ALL JOINTS IN THE RUNNING LENGTH
 - OVERLAP DPC OVER THE FULL WIDTH OF THE WALL AT INTERSECTIONS AND ANGLES.
 - ALL HORIZONTAL DAMP-PROOF COURSES SHALL PROTRUDE 5mm FROM THE EXTERNAL FACE OF THE WALL.
 - IN CAVITY WALLS, DPC SHALL BE LAID ACROSS THE FULL WIDTH OF THE WALL INCLUDING THE CAVITY AND SHALL BE STAMPED DOWN ONE COURSE IN THE CAVITY OVER A MORTAR FILL.
- ## 12. ALUMINIUM WINDOW AND DOOR FRAMES
- NATURAL ANODISED ALUMINIUM WINDOWFRAME TO COMPLY WITH THE MINIMUM RECOMMENDED PERFORMANCE REQUIREMENTS AS SET OUT BY THE ASSOCIATION OF ARCHITECTURAL ALUMINIUM MANUFACTURERS OF SOUTH AFRICA (AAMA) IN THEIR GENERAL SPECIFICATION FOR ARCHITECTURAL ALUMINIUM AND GLASS PRODUCTS - JUNE 2004 OR THE LATEST EDITION THEREOF. TOGETHER WITH OTHER SELECTION GUIDELINES FOR PERFORMANCE - ALL ALUMINIUM PRODUCTS SHALL COMPLY WITH THE AAMA'S PERFORMANCE CLASS CRITERIA AD (BUILT-UP AREAS AND CITY CENTRES), AS WELL AS STANDARDS WHICH OVERRIDES ALL PREVIOUS STANDARDS. A CERTIFICATE OF COMPLIANCE IS TO BE PROVIDED, PRIOR TO COMMENCEMENT OF INSTALLATION ON SITE. THAT ALL OVERSLAP SUPPLIED MEETS WITH SASS 989 IN ALL ASPECTS A GUARANTEE OF NOT LESS THAN 10 (TEN) YEARS IS TO BE PROVIDED, PRIOR TO SITE INSTALLATION, AGAINST PEELING AND DISCOLOURATION OF ALL POWDER COATING.

MASONRY, CEMENT AND CONCRETE NOTES:

ALL MASONRY UNITS SHALL HAVE A COMPRESSIVE STRENGTH NOT LESS THAN 7MPa.

BURNED CLAY MASONRY UNITS SHALL COMPLY WITH THE REQUIREMENTS OF SANS 227.

CONCRETE MASONRY UNITS SHALL COMPLY WITH THE REQUIREMENTS OF SANS 227.

MASONRY WALLINGS SHALL COMPLY WITH THE REQUIREMENTS OF SANS 2001-Civil:2007.

CEMENT USED FOR MORTAR SHALL BE COMMON CEMENTS COMPLYING WITH THE REQUIREMENTS OF SANS EN 197-1 & MASONRY CEMENTS COMPLYING WITH THE REQUIREMENTS OF SANS EN 413-1.

MORTAR SHALL BE CLASS II HAVING A MIN. COMPRESSIVE STRENGTH AT 28 DAYS OF 7MPa AS PER SABS 0164-1.

PRECAST CONCRETE LIMITS USED FOR STRUCTURAL PURPOSES SHALL COMPLY WITH THE REQUIREMENTS OF SANS 1504.

[illegible]

Department of Arts and Culture

29°41'50.43"S 30°57'25.94"E
DOCTOR J.L DUBE DRIVE
INANDA, KWAZULU NATAL

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2018-02

JL DUBE ALTERNATIVE

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