

GENERAL NOTES :

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECT, MECHANICAL, ELECTRICIAN AND PROCESS DRAWINGS.
2. THE CONTRACTOR SHALL CHECK ALL PROJECT DIMENSIONS ON SITE BEFOREHAND. ANY DIFFERENCES SHALL IMMEDIATELY BE REPORTED TO THE ENGINEER.
3. ALL SANS SPECIFICATIONS MENTIONED IN THE NOTES, ON THE DRAWING AND IN THE PROJECT SPECIFICATIONS SHALL BE AVAILABLE ON SITE AT ALL TIMES.
4. METHOD STATEMENTS TO BE ISSUED 21 DAYS PRIOR TO COMMENCEMENT OF APPLICABLE WORK.
5. GEOTECHNICAL HOLD POINT : ALL EXCAVATIONS SHALL BE INSPECTED AND VERIFIED BY THE DESIGNER PRIOR TO PLACING OF BLINDING.

DESIGN :

1. LOADS :
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| 1.1 | TRADING FLOOR | : 40 kPa (SLS) |
| 1.2 | STORAGE AREAS, RECEIVING, GOODS, HANDLING, SERVICE PASSAGES | : 12.5 kPa (SLS) |
2. SOIL BEARING CAPACITY : 150 kPa (SLS)

CONCRETE NOTES :

1. ALL CONCRETE WORK SHALL BE DONE ACCORDING TO SABS 1200 G AND 1200 GF.
2. CONCRETE STRENGTHES :
- STRUCTURAL 35MPa/19mm
 - MASS CONCRETE 15MPa/19mm
 - BLINDING 15MPa/19mm
 - BENCHING 35MPa/19mm
 - APRON 25MPa/19mm
 - NO-FINES NF19
 - PRECAST 35MPa/19mm
3. SURFACE FINISHES :
- APRONS AND RAMPS : WOOD FLOAT
 - FORMED SURFACE FINISHES :
 - CONCEALED SURFACES CLASS F1
 - EXPOSED SURFACES CLASS F2
 - UNIFORM SURFACE FINISHES :
 - CONCEALED SURFACES CLASS U1
 - EXPOSED SURFACES CLASS U2
- ALL CASTING PROCEDURES, CONSTRUCTION METHODS AND POSITION OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- A 25mm x 25mm CHAMFER SHALL BE PROVIDED ON ALL VISIBLE CORNERS OF OFF-SHUTTER CONCRETE (UNLESS OTHERWISE INDICATED).
- COVER BLOCKS TO REINFORCEMENT SHALL BE CONCRETE OF THE SAME STRENGTH AS THE STRUCTURE.
4. ALL ROOF CONCRETE SHOULD BE 35MPa WITH THE FOLLOWING ADDITIVES;
- FUGE B
 - 600g FIBRINXT
- SLAB MUST BE CURED USING PROFILM 19 TO MANUFACTURES SPECIFICATIONS.
5. ALL SETTING OUT FOR PENETRATIONS SMALLER THAN 300w x 300i x 300d TO BE REFERRED TO ARCHITECTS DRAWINGS.

STRUCTURAL STEEL NOTES :

1. ALL STRUCTURAL STEEL TO BE GRADE 350W UNLESS OTHERWISE SHOWN.
2. STRUCTURAL STEEL TO COMPLY WITH SANS 1200H / SANS2001_CS1.
3. CERTIFICATE FROM THE STEEL MANUFACTURER VERIFYING STEEL GRADE TO BE SUBMITTED TO THE ENGINEER.
4. ALL THE WELDS TO BE 6mm CONTINUOUS FILLET WELDS UNLESS SHOWN OTHERWISE AND TO CONFORM TO APPROVED STANDARDS (SANS 10 044 AND SANS 10 167).
5. ELECTRODES FOR ELECTRIC WELDING SHELL BE E70XX FOR OTHER WELDING TYPES, ELECTRODES TO BE APPROVED BY THE ENGINEER.
6. BUTT WELDS AND SPLICES SHALL DEVELOP THE FULL STRENGTH OF THE JOINED ELEMENTS.
7. WELDING SHALL BE PERFORMED BY CODED WELDERS, SUPPORTING DOCUMENTATION TO BE SUBMITTED TO THE ENGINEER.
8. QUALITY CONTROL ON WELDS SHALL BE AS FOLLOWS :
- 8.1. ALL WELDS TO BE INSPECTED USING VISUAL AIDS.
- 8.2. BUTT WELDS : 100% ULTRASONIC NDT
- 8.3. FILLET WELDS : 20% MPI
- 8.4. CRANE / CRAWL BEAMS : 100% ULTRASONIC NDT
9. ALL BOLTS TO BE M16 (GRADE 8.8) UNLESS OTHERWISE SHOWN.
10. WORKSHOP DRAWINGS OF STRUCTURAL STEEL WORK TO BE SUBMITTED TO THE ENGINEER PRIOR TO FABRICATION. DRAWINGS SHALL BE CHECKED FOR DESIGN COMPLIANCE. NO DIMENSIONAL CHECKS SHALL BE DONE. ALLOW 7 WORKING DAYS FOR APPROVAL.
11. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO FABRICATION OF STEEL.
12. ERECTION METHOD STATEMENT TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL, PRIOR TO ANY ERECTION WORK COMMENCE.
13. THE CONTRACTOR IS RESPONSIBLE FOR DESIGN, ERECTION, MAINTENANCE AND REMOVAL OF ALL TEMPORARY WORK (BRACING, PROPPING, ETC.)
14. WHERE HSFG BOLTS ARE SPECIFIED, THE FOLLOWING SHALL APPLY :
- 14.1. CONTACT SURFACES SHALL BE FREE FROM, GREASE, RUST, PAINT, ETC. DURING FASTENING.
- 14.2. TIGHTENING TO BE DONE IN ACCORDANCE WITH SANS 10094 CLAUSE 5.3.1 FOR FRICTION GRIP AND CORONET LOAD INDICATING WASHERS FOR HSFG BOLTS.
15. EDGES OF FLAME CUT PLATES TO BE GROUND SMOOTH.
16. GALVANIZING :
- 16.1. ALL HOT DIPPED GALVANIZING TO BE CARRIED OUT IN STRICT ACCORDANCE WITH **SANS 10121:2011 / ISO 1461:2009** BY AN SABS ACCREDITED GALVANIZER.
- 16.2. GALVANIZED STEEL MEMBERS AND BOLTS TO BE HOT DIPPED GALVANIZED TO A MEAN COATING THICKNESS OF 85µm.
- 16.3. ALL HOLLOW SECTION TO BE PROVIDED WITH VENT AND DRAINAGE HOLES.
17. NO SERVICES, OR OTHER ELEMENTS TO BE SUSPENDED FROM LIP OF PURLINS.
18. ALL COLD-FORMED STEEL SECTIONS TO HAVE A MINIMUM YEILD STRESS OF 250MPa.
19. SITE WELDING WILL ONLY BE PERMITTED ON APPROVAL BY ENGINEER.
20. WHERE APPLICABLE, NON-SHRINK CEMENTITIOUS GROUT SHALL BE PROVIDED UNDER BASE PLATES BEFORE PRIMARY LOADS ARE APPLIED TO THE STRUCTURE.

STEEL PAINT SPECIFICATIONS :



1. GENERAL :
- 1.1. PAINT TO BE DELIVERED IN ORIGINAL CONTAINERS.
- 1.2. COATING SYSTEM SHALL BE FROM ONE MANUFACTURER ONLY.
- 1.3. COATING TO BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 1.4. PAINT COLOUR TO BE AS PER ARCHITECHT'S REQUIREMENTS.
2. SURFACE PREPARATION IN THE WORKSHOP :
- 2.1. SURFACE PREPARATION IS HAND TOOL CLEAN TO ST 2 IN ACCORDANCE TO ISO 8501-1-2007.
- 2.2. REMOVE GREASE AND OIL WITH A SINGLE PACKAGE, MEDIUM DUTY SOLVENT DEGREASER AND RINSE WITH POTABLE RUNNING WATER.
3. PAINTING SYSTEM TO BE APPLIED IN WORKSHOP :
- 3.1. PRIMER, UNDERCOAT AND ONE LAYER OF TOP COAT TO BE APPLIED IN THE WORKSHOP BEFORE BEING TRANSPORTED TO SITE.
- 3.2. PRIMER : ONE COAT - SINGLE PACKAGE, FAST DRYING MODIFIED ALKYD ZINC PHOSPHATE PRIMER TO 75 MICRON OR HIGHER DFT.
- 3.3. UNDERCOAT : ONE COAT - MODIFIED MEDIUM OIL ALKYD UNDERCOAT TO 40 MICRON OR HIGHER DFT.
- 3.4. TOP COAT : ONE COAT - MODIFIED ALKYD ENAMEL TO 40 MICRON OR HIGHER DFT. COLOUR TO BE PER ARCHITECT'S DETAILS.
4. PAINTING ON SITE :
- 4.1. TOP COAT : ONE COAT - MODIFIED ALKYD ENAMEL TO 40 MICRON OR HIGHER DFT.
5. REPAIRS TO PAINTWORK :
- 5.1. ALL ITEMS OF STEELWORK WILL BE EXAMINED ON SITE BEFORE AND AFTER ERECTION FOR DAMAGE TO THE PAINTWORK.
- 5.2. DAMAGED AREAS (INCLUDING SITE WELDS AND GUTTER JOINTS) ARE TO BE DEGREASED AND DE-RUSTED AND REPAIRED AS FOLLOWS :
- REPAIRS TO THE LOWEST DAMAGED PAINT LAYER TO BE CONDUCTED. SURROUNDING PAINTWORK THAT IS STILL INTACT MUST BE FEATHERD FOR A DISTANCE OF 20mm BEYOND THE DAMAGED AREA.
 - THE PAINTING SYSTEM FOR REPAIRS IS TO COMMENCE AT THE LOWEST LAYER THAT WAS DAMAGED AND APPLIED TO THE TOP COAT.

REINFORCEMENT NOTES :

1. REINFORCEMENT CHARACTERISTICS :
- MILD STEEL (PREFIX - "R") - fy = 250MPa
 - HIGH TENSILE STEEL (PREFIX - "Y") - fy = 450MPa
2. CONCRETE COVER :
- ALL CONCRETE : 40mm UNLESS INDICATED OTHERWISE.
3. REINFORCEMENT DETAILING SPECIFICATIONS BASED ON SANS 10144.
4. MINIMUM LAPPING OF REINFORCEMENT : MIN. 50 x SMALLER DIAMETER
5. ALL REINFORCEMENT TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO THE CASTING OF ANY CONCRETE.
6. ABBREVIATIONS :
- EW - EACH WAY
 - ABR - ALTERNATE BARS REVERSED
 - ALT - ALTERNATE
 - EF - EACH FACE
 - FF - FAR FACE
 - HOR - HORIZONTAL
 - T1 - HIGHEST OF TOP LAYERS
 - T2 - SECOND HIGHEST OF TOP LAYERS
 - STG - ALTERNATE BARS STAGGERED BY THE AMOUNT SHOWN
 - NF - NEAR FACE
 - OF - OUTSIDE FACE
 - IF - INSIDE FACE
 - IL - INSIDE LAYER
 - OL - OUTSIDE LAYER
 - VER - VERTICAL
 - B1 - LOWEST OF BOTTOM LAYERS
 - B2 - SECOND LOWEST OF BOTTOM LAYERS

BRICK NOTES :

1. MASONRY UNITS TO COMPLY WITH THE FOLLOWING :
- SANS 227 : BURNT CLAY
 - SANS 285 : CALCIUM SILICATE UNITS
 - SANS 1215 : CONCRETE MASONRY UNITS
2. MINIMUM COMPRESSIVE STRENGTH OF BRICKWORK TO BE 14MPa
3. BRICKWORK, ANCHORS AND TIES TO COMPLY WITH THE LATEST SANS 10164 AND SANS 10400 SPECIFICATIONS.
4. MORTAR TO BE CLASS II AS PER SANS 10164 (1) TABLE 1.
5. BRICKWORK SHALL BE REINFORCED WITH APPROVED BRICK FORCE EVERY FOURTH LAYER.
6. CONTINUOUS BRICK FORCE SHALL BE SUPPLIED EVERY COURSE FOR THE FIRST 4 COURSES AND ABOVE AND BELOW OPENINGS, WINDOWS, FOUNDATIONS AND SLABS.
7. ANCHORS, TIES AND HOOPS SHALL BE HOT DIPPED GALVANIZED.
8. REFER TO ARCHITECHT'S DRAWINGS FOR BRICKWORK LAYOUT.
9. BRICKWORK TO BE FIXED TO CONCRETE AND STEEL COLUMNS USING HOOP IRONSTRAPS EVERY FOURTH COURSE.
10. FOR CAVITY WALLS, TIES SHALL BE SUPPLIED AS FOLLOWS :
- 10.1. CAVITY UP TO 100mm : 3 TIES / m²
- 10.2. CAVITIES > 100MM : 5 TIES / m²
- 10.3. AT OPENINGS AND DISCONTINUITIES PROVIDE ADDITIONAL TIES AT LAEST 300mm c/c
- 10.4. ALL TIES TO BE GALVANIZED VERTICAL TWIST PLATE TYPE TIES.
11. ANCHORS, TIES AND HOOPS SHALL BE HOT DIPPED GALVANIZED.
12. OPENINGS UP TO 2m SPAN SHALL RECEIVE **BRICKS ON EDGE** UNLESS OTHERWISE SPECIFIED.

REVISION DETAILS			
REV	DATE	DESCRIPTION	
A	13/10/2024	ISSUED FOR INFORMATION	
CLIENT			
<div> UNIVERSITEIT VAN PRETORIA UNIVERSITY OF PRETORIA YUNIBESITHI YA PRETORIA</div>			
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