

THE SPECIFICATIONS NOTED ARE AS GENERAL INFORMATION FOR DEFAULT SITUATIONS THAT MAY ARISE DURING CONSTRUCTION AND SPECIFIES THE MINIMUM QUALITATIVE REQUIREMENTS FOR CONFORMITY AND CHECKS DURING CONSTRUCTION			
	INDEX		
1.	GENERAL NOTES	3.6.	DAMP PROOF COURSE FOR CAVITY WALLS: Staggered over the 2 brick leaves of the cavity wall, so that the inner layer is level with the top of floors, and the outer layer is one brick course lower but not less than 150mm above finished ground level.
2.	SOIL COMPACTION	3.6.2.	Supply weep-holes in the form of leaving every 5th vertical joint free from mortar to allow for drainage and ventilation of the cavity.
3.	DAMP PROOF COURSES, MEMBRANES, VAPOUR BARRIERS	3.6.3.	Insert damp proof course in same manner over windows for the entire length of the lintel.
4.	TERMITE CONTROL		
5.	ACCURACY OF CONSTRUCTION		
6.	CONCRETE NOTES		
7.	PRECAST CONCRETE UNITS	3.7.	SUB SLAB DAMP PROOF MEMBRANE Use 0.375mm smooth polyolefin complying with SANS 952 type C
8.	CONCRETE FLOORS ON THE GROUND	3.7.1.	Lay damp proof membrane under concrete surface beds of concrete floors, toid membrane up against foundation walls
	Invoked standards	3.7.2.	Lay damp proof membrane in the largest practical sizes with 200mm laps
	Industrial	3.7.3.	Seal laps in accordance with manufacturers instructions
	Panels		
	Fabric re-inforcement		
	Placing, finishing		
	Industrial floors		
	Contraction joints		
	Contraction or door joints		
	Isolation or movement joints		
9.	MASONRY	4.	TERMITE CONTROL: Poison the soil against the inside of foundation walls and under floors with soil insecticide complying with SANS 1165, applied according to SANS 10124.
	Foundations	4.2.	By a certified pest contractor
	Walling	4.3.	Not when soil is excessively wet
	Mortar	4.4.	Do not disturb treated surface
	Re-inforcing	4.5.	Do not bury timber scraps or organic debris
	Brickwork	4.6.	Treat foundation trench bottoms before casting
	Damp proof	4.7.	Treat every 300mm backfill before compacting
	Work	4.8.	Treat full length of pipe and cable trench inside the building and for a distance of 3m outside of the building
	Additional clauses	4.9.	Take full and prescribed health precautions as prescribed by OHASA
10.	PLASTERING	4.10.	OBTAIN A WRITTEN GUARANTEE FROM THE PEST CONTRACTOR FOR 10 YEARS FOR THE EFFECTIVENESS OF TREATMENT, C.O.C. TO BE PRESENTED ON CLOSE OUT TO PRINCIPAL AGENT FOR APPROVAL AND SIGN OFF.
11.	STRUCTURAL TIMBER		
	Invoked standards		
	Materials		
	Fasteners		
	Fibre cement sheets		
	Handling of roof structure		
	Certificate		
	Wall plates		
	Gang planks		
	Roof beams & lintels		
	Purlins & battens		
	Fascias & barge boards		
12.	STRUCTURAL STEEL		
	Structural steelwork	6.1.	SANS 1200 G Concrete Structural
	Structural steel tubes	6.2.	SANS 10100 The structural use of Concrete
	Steel tubes for furniture	6.3.	SANS 10109 Part 1 & 2
	Test certificate	6.4.	All concrete will conform to SANS codes to achieve a compressive strength of 28MPa 28 days.
	Shop drawings	6.5.	A minimum coverage of 50mm for formed concrete, and 70mm for concrete against earth.
	Welding	6.6.	Form drips to all exposed concrete edges, lintels and beam edges whether specified or not.
	Pre-painting	6.7.	All ready mix concrete where approved to conform to SANS 878, supplier will be responsible for quality of material and design of the mix, retain delivery tickets for inspection, and prepare at least 3 test cubes per every 50m³
	Galvanising	6.8.	Use steel bars for concrete reinforcement complying with SANS 920 of type and nominal size as specified on structural engineers drawings. Store steel off ground so as to prevent distortion, protect from aggressive environments and contamination
	Duplex coatings	6.9.	Ties: cast or shotlall 600x30x1.2mm galvanised MS tie 150mm deep @900 centres where brickwork abuts concrete
	Fire protection	6.10.	Ensure all personnel and equipment are available at day of casting and cast walls and columns in single lifts not less than one storey in height use a poker vibrator under supervision and by trained personnel and strike off day joints level and true.
	Certification	6.11.	Testing: Cast concrete test cubes of size and quantity at intervals and of batches as specified by structural dwgs in accordance with SANS test method 5861. Test all cubes by an accredited laboratory for compressive strength according to SANS 5862.
13.	PROFILED ROOFING & CLADDING SHEETS	6.12.	Curing: Ensure continuous hydration by curing the concrete with an application of a liquid membrane-forming curing compound at an approved rate; by ponding with water; by covering with polyethylene or similar vapour proof material in large sheets. Cure for a minimum of 7 days.
	Material	6.13.	ANY DEVIATION FROM THE DRAWINGS TO BE REPORTED TO ARCHITECT IMMEDIATELY. ALL DIMENSIONS, LEVELS AND ANGLES TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION.
	Pre-finish of steel		
	Glass re-inforced polyester laminated sheets		
	Polycarbonate sheets		
	Insulated panels		
	Profile, lengths & fixing system		
	Storing roofing materials		
	Fasteners & washers		
	End laps & purlin spacing		
	Fixing		
	No exposed fixing required		
	Flashings & linings		
14.	(open space for adding new text)		
15.	WATERPROOFING		
	Invoked standards		
	Type		
	Preparation		
	Outlets		
	General application		
	Testing		
	Protection		
	Maintenance		
	Joint fillers/sealants		
	Preparation		
	Sealing		
16.	PATENT SUSPENDED CEILING		
	Boards		
	Suspension fittings		
	Fixing		
17.	PARTITIONS & LIGHT WEIGHT INTERNAL WALLS		
	Drywall partitions		
	Fibre cement board		
	Studs & tracks		
	Aluminium extrusions		
	Installation		
	Accuracy		
	At completion		
18.	PLASTER & SCREEDS		
	Plaster		
	Gypsum plaster		
	Corner protection		
19.	SCREEDS & TOPPING		
	Invoked standards		
	Cement		
	Aggregate for toppings & screeds		
	Aggregate from natural stones		
	Stone for topping		
20.	JOINTS		
	Isolation joints		
	10mm wide joints		
	Intermediate joints		
	Accuracy		
	External thresholds & stair treads		
	Edge strips		
	Skirtings		
	Curing		
	Inspection, testing and repair		
21.	PAINT		
	Invoked standards		
	Preambles		
	Preparation of surfaces		
	Colours		
	Preparation for painting		
	Alkyd paint on plaster		
	Emulsion paint on plaster		
	Emulsion paint on fibre cement fascias, barge board cladding		
	Alkyd paint on structural steel		
	Alkyd paint on non-structural steel		
	Paint on galvanised steel		
22.	GLAZING		
1.	GENERAL NOTES:		
	1.1.	All dimensions are given in millimeters on architectural drawings	
	1.2.	No scaling from any drawings allowed, and dimensions take precedence	
	1.3.	Any discrepancies and/or indistinctiveness should be referred to Architect before commencement of construction.	
	1.4.	All dimensions to be verified and coordinated on site prior to construction.	
	1.5.	All structural elements, steel, timber and concrete as per structural drawings, details and specifications.	
	1.6.	For full and clear specification on all finishes refer to Finishing schedule.	
17.	ALL SANS CODES QUOTED HEREUNDER AND IN DRAWINGS ARE INVOKED STANDARDS AND THE CONTRACTOR MUST COMPLY WHEN INVOKED IN A SPECIFICATION. CONTRACTOR MAY BE CALLED UPON TO PRODUCE THE RELEVANT SANS CODE ON SITE TO PROVE COGNIZANCE OF THE STANDARD.		
2.	SOIL COMPACTION UNDER SLABS:		
	All according to Geotechnical Report Design		
3.	DAMP PROOF COURSES, MEMBRANES, VAPOUR BARRIERS		
	NBR K Schedule 16		
	NBR J2		
	SANS 10021 Waterproofing of buildings (Including damp proofing and vapour barrier installation)		
	SANS 952 Polyolefin film for damp and waterproofing in buildings, including appendix C Notes on use, installation and protection of film.		
3.5.	DAMP PROOF COURSE		
3.5.1.	Use 0.375mm black embossed polyolefin damp proof course complying with SANS 952 B		
3.5.2.	Lay damp proof course in un-jointed lengths where possible and with full corner laps over full width of wall, level with the top of floors and not less than 150mm above finished ground level, and under copings and in parapets walls.		
3.5.3.	Apply damp proof course on the following (and where specified)		
3.5.4.	Under window sills and over lintels where cavity walls are applicable as per detail, tuck in under window profile.		
4.1.	ALL CONSTRUCTION WORK IN ACCORDANCE WITH SANS 10155 ACCURACY LEVEL II, UNLESS OTHERWISE STATED.		
4.2.	ALL OFF SHUTTER WORK TO BE OF ACCURACY LEVEL I AS PER SANS 10155, UNLESS CONFIRMED IN WRITING BY ARCHITECT TO STATE OTHERWISE.		
5.	ACCURACY OF CONSTRUCTION		
5.1.	ALL CONSTRUCTION WORK IN ACCORDANCE WITH SANS 10155 ACCURACY LEVEL II, UNLESS OTHERWISE STATED.		
5.2.	ALL OFF SHUTTER WORK TO BE OF ACCURACY LEVEL I AS PER SANS 10155, UNLESS CONFIRMED IN WRITING BY ARCHITECT TO STATE OTHERWISE.		
6.	CONCRETE NOTES:		
6.1.	SANS 1200 G Concrete Structural		
6.2.	SANS 10100 The structural use of Concrete		
6.3.	SANS 10109 Part 1 & 2		
6.4.	All concrete will conform to SANS codes to achieve a compressive strength of 28MPa 28 days.		
6.5.	A minimum coverage of 50mm for formed concrete, and 70mm for concrete against earth.		
6.6.	Form drips to all exposed concrete edges, lintels and beam edges whether specified or not.		
6.7.	All ready mix concrete where approved to conform to SANS 878, supplier will be responsible for quality of material and design of the mix, retain delivery tickets for inspection, and prepare at least 3 test cubes per every 50m³		
6.8.	Use steel bars for concrete reinforcement complying with SANS 920 of type and nominal size as specified on structural engineers drawings. Store steel off ground so as to prevent distortion, protect from aggressive environments and contamination		
6.9.	Ties: cast or shotlall 600x30x1.2mm galvanised MS tie 150mm deep @900 centres where brickwork abuts concrete		
6.10.	Ensure all personnel and equipment are available at day of casting and cast walls and columns in single lifts not less than one storey in height use a poker vibrator under supervision and by trained personnel and strike off day joints level and true.		
6.11.	Testing: Cast concrete test cubes of size and quantity at intervals and of batches as specified by structural dwgs in accordance with SANS test method 5861. Test all cubes by an accredited laboratory for compressive strength according to SANS 5862.		
6.12.	Curing: Ensure continuous hydration by curing the concrete with an application of a liquid membrane-forming curing compound at an approved rate; by ponding with water; by covering with polyethylene or similar vapour proof material in large sheets. Cure for a minimum of 7 days.		
6.13.	ANY DEVIATION FROM THE DRAWINGS TO BE REPORTED TO ARCHITECT IMMEDIATELY. ALL DIMENSIONS, LEVELS AND ANGLES TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION.		
7.	PRECAST CONCRETE UNITS NOTES:		
7.1.	Contractor must submit a methodology for the casting of precast concrete in line with structural concrete notes on construction as well architectural note on finishing.		
7.2.	Prepare a sample for approval by Structural and Architectural Approved representative prior to construction, along with applicable test cube results for said sample. This needs to be programmed well in advance to allow for approval of samples, and avoid delays.		
7.3.	Fibre reinforcement will be allowed into the mix when mix design is done by a competent person.		
7.4.	Do not build in pre-cast units before 21 d of casting bed and joint solidity in 1:3 (cement : sand) mortar.		
8.	CONCRETE FLOORS ON THE GROUND		
8.1.	INVOKED STANDARD SANS 10109 Concrete floors		
8.2.	INDUSTRIAL: Direct-finished one course slab designed and constructed to SANS 10109 under supervision of a Competent Person / see <u>STRUCTURAL DRAWINGS</u>		
8.3.	PANELS		
	Butt-joint panel dimension in case of unreinforced domestic/institutional slab types:		
	8.3.1.1. 3.5 m where floors are covered with carpets and flexible floor covering		
	8.3.1.2. 2.5 m where floors are covered with semi-flexible or rigid tiles		
8.4.	FABRIC REINFORCEMENT		
8.4.1.	Fabric-reinforced under direction of structural engineer, see structural drawings specifications		
8.4.2.	Welded steel fabric: SANS 1024 as specified on structural drawings		
8.4.3.	In large mats, overlap 300 mm, place near top surface		
8.4.4.	Do not cross over construction or day joints.		
8.5.	PLACING, FINISHING		
8.5.1.	Place, compact, level, strike off, and wood float concrete floors to level surface or to gradient as shown on except where power floating is specified.		
8.5.2.	Direct-finish by means of delayed trowelling technique.		
8.5.2.1.	Leave surface undisturbed until bleeding has ceased and surface has stiffened so that foot pressure barely indents the surface (2-4 hours)		
8.5.2.2.	Remove bleed water and laitance		
8.5.2.3.	Trowel using pressure, or power trowel, to produce a smooth finish or wood float to produce a slip-free surface as shown on drawings		
8.5.2.4.	Do not add water or neat cement.		
8.6.	INDUSTRIAL FLOORS:		
	Preparation:		
	8.6.1.1. Prepare thresholds by casting concrete of same thickness, material and finish as specified for floor, in all door openings; thresholds to have key ways		
	8.6.1.2. Prepare for contraction, construction and isolation joints; in case of columns, cast		
	8.6.1.3. Concrete against edge forms placed diagonally to column: as per structural drawings		
8.7.	CONTRACTION JOINTS:		
	Spacing: As per structural drawings		
8.7.1.	Pattern: saw with a mechanical concrete saw to blade width and a depth of one quarter of the slab thickness		
8.7.2.	Saw only after concrete has hardened sufficiently but before shrinkage cracking can occur (between 4 and 48 hours after placement).		
8.8.	CONSTRUCTION OR DAY JOINTS:		
8.8.1.	Cast at end of day's casting or where concreting has stopped for more than 45 minutes		
8.8.2.	Keyways: trapezoidal; coat joint face of keyways with suitable debonding agent like lime wash or bitumen		
8.8.2.1.	Dowels: 16 mm diameter x 300 mm length plain round mild steel dowels to SANS 920, placed at mid-depth of the slab at 300 mm spacing; coat dowels for two-thirds of their length with a bond-breaking compound		
8.8.2.2.	Round off: all construction joint edges to a radius of 3 mm.		
8.9.	ISOLATION OR MOVEMENT JOINTS:		
8.9.1.	Position: where floors abut fixed structures like walls, columns, sumps or inspection chambers or in external floors or paving and (not on) where details specify		
8.9.2.	Forming: 20 mm thick compressible material (to 10mm) bitumen-impregnated softboard		
8.9.3.	Sealing: Seal with suitable elastomeric material as specified on the drawings		
8.9.4.	Ream sawn joints to width and depth as required and according to the sealant manufacturer's instructions.		
9.	MASONRY		
9.0.	FOUNDATIONS		
9.0.1.	SANS 2001-CM2 Construction Works: Strip footings, pad footings and slab-on-the-ground foundations for masonry walling		
9.0.2.	SANS 0400-1990 Part H & J		
9.0.3.	MINIMUM FOUNDING DEPTH: 340MM TO T.O.C.		
9.1.	MASONRY WALLING		
9.1.1.	SANS 2001-CM1: Construction Works: Masonry walling		
9.1.2.	SANS 227-Burnt clay masonry units		
9.1.3.	Class of face units: NFX		
9.1.4.	Class of common units: NFP as per client requirements		
NOTE:	ALL COURSE COORDINATION TO 85mm INCREMENTS. ALL WORK TO BE CO-ORDINATED ACCORDINGLY		
9.0.1.	Work size: 222 x 103 x 76 mm (Imperial)		
9.0.2.	Colour of face units: GREY		
9.0.3.	Nature of unit:		
9.1.1.	HOLLOW CORE: FOR ALL VERTICAL MASONRY WITHIN WALLS.		
9.1.7.2.	SOLID CORE FOR THE FOLLOWING ITEMS OR AS INDICATED BY DRAWINGS:		
9.1.7.2.1.	Balustrade copings		
9.1.7.2.2.	Brick on edge clips		
9.1.7.2.3.	Parapet header courses		
9.0.4.	Uniformity of colour and texture (sample of 20 units required): required		
9.0.5.	Nominal compressive strength: As per SANS 0400 for NFP and NFX		
9.0.6.	Grade of efflorescence:		
9.0.6.1.	Normal for internal walls not exposed to damp:		
9.0.6.2.	Special for visible unplastered foundation walls, retaining walls and free-standing walls		
9.0.6.3.	Limits of water absorption: 6-14%		
9.0.6.4.	Limits of moisture expansion: 0.20%		
9.0.6.5.	Required marking: above designation on each dispatch or consignment note		
9.1.	MORTAR:		
9.1.1.	Sand: SANS 1090		
9.1.2.	Mortar plasticizers and set-retarder admixtures: not permitted		
9.1.3.	Pigments for mortar: not required.		
9.2.	REINFORCING:		
9.2.1.	Brickforce and rod reinforcement material: Galvanised MS as indicated on drawings		
9.2.2.	Pre-stressing steel: not required		
9.2.3.	Wall rebar material in corrosive areas: 750 g/m2 galvanised steel		
9.2.3.	Brickforce		
9.2.3.1.	To be installed in every course of foundation walls		
9.2.3.2.	To be installed in top 4 courses under soft soil of slab under slip sheets		
9.2.3.3.	Every opening, window, door or access panel with masonry superstructure to extend 1.5m on either side of opening, install in every course for 4 courses ABOVE AND BELOW OPENING		
9.2.3.4.	Where brickforce extends over movement joint at 250mm concertina joint to be folded into joint		
9.2.3.5.	All brickforce continuances to have a min overlap of 300mm		
9.2.3.6.	All perpendicular wall joints to receive brickforce every 3rd course to tie in with main perimeter wall, extend into secondary tie in wall for min length of 600mm		
9.2.3.7.	All brickforce to be minimum 275 galvanised		
9.2.3.8.	IN ALL WALLS EVERY 4TH COURSE TO RECEIVE BRICKFORCE		
9.2.3.9.	All brickforce specifications above are additive and not mutually exclusive. When clash occurs install both.		
9.3.	NOTE: ALL CAVITY WALLS TO RECEIVE GALVANISED WIRE TIES AS SPECIFIED ABOVE TO THE FREQUENCY OF 4 PER 100 OF ELEVATION. WIRE TIES TO FORM DRIP MUD CAVITY, ALL CAVITIES TO REMAIN VOIDED AND EMPTY.		
9.4.	DAMP-PROOFING:		
9.4.1.	Damp-proof course(DPC)material marked with type, width, texture at regular intervals:		
9.5.1.1.	Polyolefin film SANS 952 type B*		
9.5.1.2.	Bituminous felt SANS 248		
	Apply as and where indicated on drawings		
9.5.	WORK:		
9.5.1.	Mortar class II not II:		
9.5.2.	Face work jointing: Flush		
9.5.3.	Face work jointing: Flush		
9.5.4.	Bond for collar jointing (double leaf), diaphragm and cavity walls:		
9.6.4.1.	Stretcher bond - General construction		
9.6.4.2.	English garden wall bond/header course every fifth course):		
9.6.4.3.	Feature wall to stairs		
9.6.4.4.	Stacked/Bonded Bond: Window sub and superstructure		
9.6.4.5.	Exterior Face brick skin only		
9.6.4.6.	Reference panels: not required		
9.5.5.	Position of control and articulation joints: indicated on drawings and details		
9.5.6.	Degree of accuracy II not II:		
9.5.7.	Frequency of testing strength mortar if not default: Every 50m³		
9.6.	ADDITIONAL CLAUSES:		
	In the case of day facing units, obtain from the manufacturer/supplier agreement on the following in writing:		
9.6.1.	The required application e.g. type of building, finish etc.;		
9.6.2.	The degree of exposure to weather conditions; Closeness to the sea etc.;		
9.6.3.	Track record of the preferred brick type and area of the building;		
9.6.4.	An undertaking or warranty that the bricks delivered will be fit for purpose;		
9.6.5.	Colour expectations in the case of face bricks;		
9.6.6.	The acceptable levels of breakage during delivery to site.		
10.	PLASTERING:		
Cement:	Use common portland cement complying with SANS 5-197-1 32.5 kN		
	Type composition and strength to be displayed on bag or delivery slip.		
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