

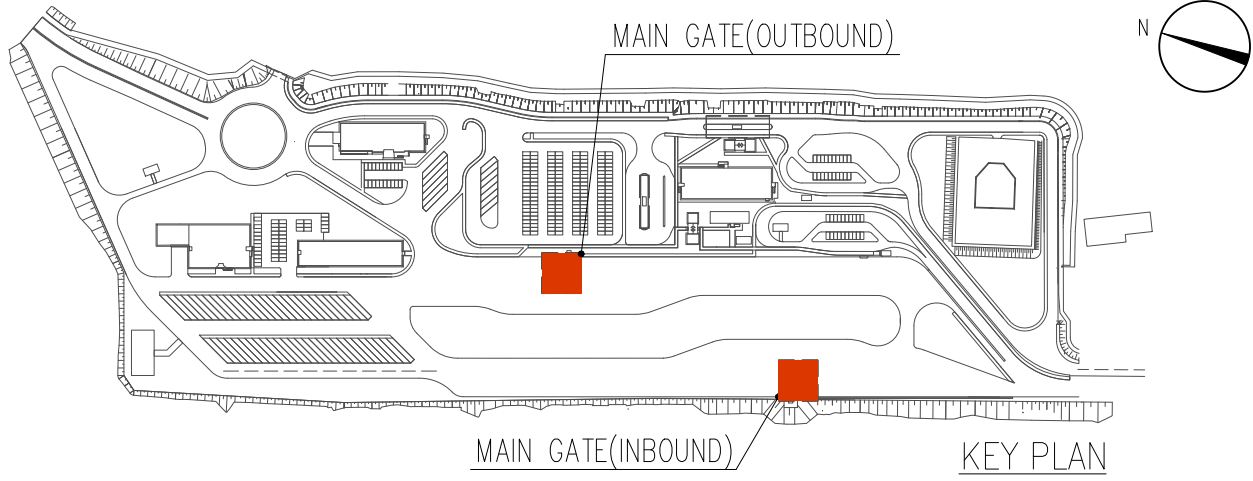
ENGINEERING PRACTICE TABLE (FISCAL AND BORDER POLICE ROOM)

LOCATION	ITEMS	ARCHITECTURAL DETAILS	MATERIAL PROPERTIES
INTERNAL WALL	INTERNAL WALL 1 PAINTED WALL OFFICE	WHITE INTERIOR WALL EMULSION PAINT (WATER-BASED), SPRAY APPLIED IN 2 COATS	1.THE PUTTY SHOULD HAVE NO CAKING, UNIFORM TEXTURE, AND A BONDING STRENGTH OF \geq
		PUTTY TO BE PLASTERED TWO COURSES	0.5MPA
		6MM THICK 1:2 CEMENT MORTAR WELL PLASTERED	2.CEMENT MORTAR SHOULD HAVE GOOD COMPRESSIVE STRENGTH. BONDING STRENGTH \geq 0.5MPA
		9MM THICK 1:3 CEMENT MORTAR	3.THE DRY DENSITY OF THE FOUNDATION WALL SHOULD BE \geq 1.2T/M ³ ; AND THE STRENGTH
	INTERNAL WALL 2 GLAZED TILE WALL TOILET	BASE WALL (TO BE PAINTED WITH SPECIAL INTERFACIAL AGENT ONE COURSE)	SHOULD BE \geq 8.00M/M ³
		5MM THICK GLAZED TILE, WHITE CEMENT POINTING	1.GLAZED TILE HAS GOOD IMPACT RESISTANCE PROPERTY, CHEMICAL CORROSION
		4MM THICK 1:1 CEMENT MORTAR WITH 20% WATER CONTENT GLUE BONDING LAYER	RESISTANCE RATING \geq GRADE B, AND FRICTION COEFFICIENT \geq 0.60.PLANARITY
		CEMENT PASTE ONE COURSE	+0.5%~-0.3%, WATER ABSORPTION $<$ 10%, BENDING STRENGTH $>$ 15Nmm ²
		1.5MM THICK POLYMER WATERPROOF CEMENT COATING, IN FULL LENGTH	2.CEMENT MORTAR SHOULD HAVE GOOD COMPRESSIVE STRENGTH. BONDING STRENGTH
		300X300(LENGTH AND WIDTH)	9MM THICK 1:3 CEMENT MORTAR WELL COMPACTED AND PLASTERED
		TO BE PAINTED WITH SPECIAL INTERFACIAL AGENT	SHOULD BE \geq 0.5MPA
		BASE WALL, C20/25 CONCRETE WALL TO BE PROVIDED AT THE BOTTOM OF WALL (APART FROM DOOR OPENINGS). WALL HEIGHT IS 200MM, AND WIDTH SHALL BE THE SAME AS WALL THICKNESS.	3.POLYMER WATERPROOF CEMENT COATING HAS GOOD IMPERMEABILITY PROPERTY AND A BONDING STRENGTH GREATER THAN 1.0MPA.
	DROP-CEILING		4.BONDING STRENGTH OF THE SPECIAL INTERFACE AGENT SHOULD BE \geq 1.0MPA, AND HAS GOOD RESISTANCE TO WATER AND ALKALI EROSION.
			5.THE DRY DENSITY OF THE FOUNDATION WALL SHOULD BE \geq 1.2T/M ³ ; AND THE STRENGTH
			SHOULD BE \geq 8.00M/M ³
		2.5MM THICK PVC BOARD FIXED WITH SELF TAPPING SCREWS	1.PVC BOARD DENSITY \geq 1.3G/CM ³ , TENSILE STRENGTH \geq 40MPA, BENDING STRENGTH \geq
		LIGHT STEEL KEEL (DOUBLE LAYER): INTERVALS BETWEEN MAIN KEELS EQUAL TO	60MPA.
		900~1000MM, INTERVALS BETWEEN MINOR KEELS EQUAL TO 600MM, INTERVALS BETWEEN	2.LIGHT STEEL KEEL TENSILE STRENGTH SHOULD BE \geq 300MPA.
		TRANSVERSAL KEELS EQUAL TO 600MM	
		RESERVE AT THE BOTTOM OF THE BOARD R8HANGING BARS,WITH A BIDIRECTIONAL MID RANGE OF 900~1200	
	EXTERNAL WALL PAINTED WALL ALL EXTERNAL WALLS	WHITE INTERIOR WALL EMULSION PAINT (WATER-BASED), SPRAY APPLIED IN 2 COATS	1.INTERIOR WALL PAINT SURFACE GLOSS INORGANIC COATING, WITH A SERVICE LIFE OF 5 YEARS, VOC \leq 120G/M ³
		PUTTY TO BE PLASTERED TWO COURSES	2.CEMENT MORTAR SHOULD HAVE GOOD COMPRESSIVE STRENGTH. BONDING STRENGTH
		3MM THICK 1:2 CEMENT MORTAR WELL PLASTERED	SHOULD BE \geq 0.5MPA
		5MM THICK 1:3 CEMENT MORTAR	
EXTERNAL WALL	EXTERNAL WALL PAINTED WALL ALL EXTERNAL WALLS	CAST-IN-SITU RC FLOOR SLAB	
		TO BE PAINTED WITH SPECIAL INTERFACIAL AGENT	1.THE BONDING PERFORMANCE OF THE INTERFACE AGENT IS \geq 1.0MPA, AND IT HAS GOOD RESISTANCE TO WATER AND ALKALI EROSION.
		15MM THICK 1:3 CEMENT MORTAR	2.CEMENT MORTAR SHOULD HAVE GOOD COMPRESSIVE STRENGTH. BONDING STRENGTH
		100MM THICK ROCK WOOL BOARD INSULATION LAYER,ATTACHED WITH ADHESIVE	SHOULD BE \geq 0.5MPA
		6MM ANTI-CRACK MORTAR, INSTALLED WITH ALKALI RESISTANT FIBERGLASS MESH FABRIC (FIXED BY ANCHOR BOLTS)	3.ROCK WOOL BOARD,THE HEAT TRANSFER COEFFICIENT U \leq 0.040W/(M \cdot K). FIRE RATING
		RE-INSTALLATION OF ALKALI-RESISTANT FIBERGLASS MESH FABRIC..	LEVEL IS A.p \geq 110kg/m ³
		SCRAPE FLEXIBLE AND WATER-RESISTANT PUTTY	4.THE TENSILE STRENGTH IN BOTH THE LATITUDINAL AND LONGITUDINAL DIRECTIONS OF
		PRIMER COAT ONE COURSE	ALKALI RESISTANT GLASS FIBER MESH FABRIC SHOULD BE \geq 1500N/50MM. THE MESH SHOULD HAVE GOOD ANTI-AGING PROPERTIES. THE BONDING STRENGTH SHOULD
	ROOF	FINAL COAT TWO COURSES	BASICALLY BE \geq 0.5MPA.
			5.THE PUTTY SHOULD HAVE NO CAKING, UNIFORM TEXTURE, AND A BONDING STRENGTH OF \geq
			0.5MPA
			6.THE WALL CONSTRUCTION MEETS THE THERMAL TRANSMITTANCE U \leq 0.45 W/(M \cdot K).
		30MM C20/25 FINE AGGREGATE CONCRETE WITH R8-250 WIREMESH INSIDE	1.SELF-ADHESIVE MODIFIED BITUMEN SHEET SHOULD BE 3 KG/M ² TO 5 KG/M ² TENSILE
		4MM THICK MODIFIED ASPHALT II TYPE WATERPROOF ROLLS	STRENGTH \geq 500 N/50 MM. TEAR STRENGTH \geq 200 N.
		20MM THICK 1: 2.5 CEMENT MORTAR LEVELING	2.ROCK WOOL BOARD,THE HEAT TRANSFER COEFFICIENT U \leq 0.040W/(M \cdot K). FIRE RATING
		LIGHT-WEIGHT CONCRETE SLOPING COURSE, AND THE THINNEST PART IS 30MM (WITH INCLINATION OF 2%)	LEVEL IS A.p \geq 110kg/m ³
ROOF	CEMENT MORTAR ROOF	100MM THICK ROCK WOOL BOARD INSULATION LAYER	3.POLYETHYLENE FILM THICKNESS ERRORS SHOULD BE CONTROLLED WITHIN \pm 10%, WITH
		TEAR STRENGTH \geq 50 N/MM.	
		FULLY-SPREAD ONE LAYER OF 0.4MM THICK POLYETHYLENE FILM	4.THE ROOF CONSTRUCTION MEETS THE THERMAL TRANSMITTANCE U \leq 0.45 W/(M \cdot K).
		CAST-IN-SITU RC FLOOR SLAB	







LOCATION	ITEMS	ARCHITECTURAL DETAILS	MATERIAL PROPERTIES
GROUND	Pv1 GROUND 1 PORCELAIN TILE OFFICE 600X600(LENGTH AND WIDTH)	10MM THICK PORCELAIN TILE WELL LAID, THIN CEMENT PASTE PITCHING	1.PORCELAIN TILE ,BREAKING STRENGTH \geq 35 MPA. DIMENSIONAL ERRORS SHOULD BE
		20MM THICK 1:3 CEMENT MORTAR	CONTROLLED WITHIN \pm 0.6%. THE TILE SURFACE SHOULD HAVE NO VISIBLE DEFECTS (SUCH
		150MM THICK C35/45 CONCRETE WITH T10-200 WIREMESH INSIDE	AS CRACKS, BUBBLES, COLOR DEVIATIONS, ETC.) PLANARITY +0.5%~-0.3%, WATER
		FULLY-SPREAD ONE LAYER OF 0.4MM THICK POLYETHYLENE FILM	ABSORPTION $<$ 10%, BENDING STRENGTH $>$ 15Nmm ²
		100MM THICK C12/15 CONCRET, LEVELED AND SMOOTH-FINISHED WITH THE ORIGINAL	2.POLYETHYLENE FILM THICKNESS ERRORS SHOULD BE CONTROLLED WITHIN \pm 10%, WITH
		GROUT AFTER POURING, (SCREED LAYER)	TEAR STRENGTH \geq 50 N/MM ²
		GEOTEXTIL 150G/ M ²	
		150MM THICK CRUSHED STONES	
	Pv2 GROUND 2 ANTI-SLIP CERAMIC TILE TOILET 600X600(LENGTH AND WIDTH)	PLAIN SOIL COMPACTION	
		10MM THICK CERAMIC TILE WELL LAID, THIN CEMENT PASTE PITCHING	1.CERAMIC TILE ,BREAKING STRENGTH \geq 35 MPA. DIMENSIONAL ERRORS SHOULD BE
		30MM THICK 1:3 CEMENT MORTAR	CONTROLLED WITHIN \pm 0.6%. THE TILE SURFACE SHOULD HAVE NO VISIBLE DEFECTS (SUCH
		2MM THICK POLYMER WATERPROOF COATING, 300MM ABOVE FLOOR ON ALL SIDE	AS CRACKS, BUBBLES, COLOR DEVIATIONS, ETC.) PLANARITY +0.5%~-0.3%, WATER
		30MM THICK FINE AGGREGATE CONCRETE AT THE THINNEST PART, LEVELED AND	ABSORPTION $<$ 10%, BENDING STRENGTH $>$ 15Nmm ²
		SMOOTH-FINISHED WITH THE ORIGINAL GROUT AFTER POURING	2.POLYMER WATERPROOF COATING SHOULD RESIST CORROSION FROM COMMON CHEMICALS
		CEMENT PASTE ONE COURSE	(SUCH AS ACIDS, ALKALIS, SALTS). BONDING STRENGTH \geq 1.0 MPA.
		150MM THICK C35/45 CONCRETE WITH T10-200 WIREMESH INSIDE	3.CEMENT MORTAR SHOULD HAVE GOOD COMPRESSIVE STRENGTH. BONDING STRENGTH
SKIRT	Rd1 SKIRT CERAMIC VENEER OFFICE 100mm(HEIGHT)	FULLY-SPREAD ONE LAYER OF 0.4MM THICK POLYETHYLENE FILM	SHOULD BE \geq 0.5MPA
		GROUT AFTER POURING, (SCREED LAYER)	4.POLYETHYLENE FILM THICKNESS ERRORS SHOULD BE CONTROLLED WITHIN \pm 10%, WITH
		GEOTEXTIL 150G/ M ²	TEAR STRENGTH \geq 50 N/MM ²
		150MM THICK CRUSHED STONES	
		PLAIN SOIL COMPACTION	
		10MM THICK CERAMIC VENEER	1.CEMENT MORTAR SHOULD HAVE GOOD COMPRESSIVE STRENGTH. BONDING STRENGTH
		4MM THICK 1:1 CEMENT MORTAR WITH 20% WATER CONTENT GLUE BONDING LAYER	SHOULD BE \geq 0.5MPA
		PLAIN CEMENT MORTAR ONE COURSE	2.PORCELAIN TILE ,BREAKING STRENGTH \geq 35 MPA. DIMENSIONAL ERRORS SHOULD BE
		6MM THICK 1:2 CEMENT MORTAR	CONTROLLED WITHIN \pm 0.6%. THE TILE SURFACE SHOULD HAVE NO VISIBLE DEFECTS (SUCH AS
		9MM THICK 1:3 CEMENT MORTAR	CRACKS, BUBBLES, COLOR DEVIATIONS, ETC.) PLANARITY +0.5%~-0.3%, WATER ABSORPTION
		BASE WALL (TO BE PAINTED WITH SPECIAL INTERFACIAL AGENT ONE COURSE)	$<$ 10%, BENDING STRENGTH $>$ 15Nmm ²
			3.THE DRY DENSITY OF THE FOUNDATION WALL SHOULD BE \geq 1.2T/M ³ ; AND THE STRENGTH
			SHOULD BE \geq 8.00M/M ³

ENGINEERING PRACTICE TABLE (STEEL SHED)

LOCATION	ITEMS	ARCHITECTURAL DETAILS	MATERIAL PROPERTIES
EXTERNAL WALL	Pa1 PAINTED METAL WALL FOR THE COVER OF THE AWNING.	LIGHT GREY(RAL9006) MOLDED STEEL PLATE. PURLIN.	1. THICKNESS 0.5MM; 2. ANTI-CORROSION GRADE C5;
	Pa2 PAINTED WALL FOR THE BASE OF CONTAINERS	TO BE PAINTED WITH SPECIAL INTERFACIAL AGENT; 15MM THICK 1:3 CEMENT MORTAR; PRIMER COAT ONE COURSE; FINAL COAT TWO COURSES;	1.THE BONDING PERFORMANCE OF THE INTERFACE AGENT IS \geq 1.0MPA, AND IT HAS GOOD RESISTANCE TO WATER AND ALKALI EROSION. 2.CEMENT MORTAR SHOULD HAVE GOOD COMPRESSIVE STRENGTH. BONDING STRENGTH SHOULD BE \geq 0.5MPA
ROOF	Pv1 METAL ROOF FOR ALL ROOFS.	LIGHT GREY(RAL9006) MOLDED STEEL PLATE. PURLIN.	1. THICKNESS 0.5MM; 2. ANTI-CORROSION GRADE C5;
GROUND	Pv2 CEMENT MORTAR GROUND FOR THE TRAFFIC ISLAND	THE REINFORCED CONCRETE SLAB SHALL BE SLOPED OUTWARD AT A 2% GRADIENT.SURFACE BRUSHED.	1. NOMINAL CONCRETE COVER OF REINFORCEMENT \geq 55 MM. 2. THE SURFACE SHOULD BE UNIFORM IN TEXTURE; FORMWORK LINERS SHOULD LEAVE NO STAINS ON CONCRETE, SHOULD BE CONNECTED AND FIXED TO THE BACKING, WITHOUT ANY DEFECTS.
COATING	COATING 1 FOR STEEL COLUMN	LIGHT GRAY(RAL9006) COATING.	1. THE SURFACE OF THE BASE MATERIAL SHALL BE THOROUGHLY DERUSTED, AND THE STANDARD SHALL REACH GRADE St3.0 (FREE OF RUST, OIL STAINS, FLOATING DUST, ETC.) AND SHOW OBVIOUS METALLIC LUSTER. THE SHARP CORNERS, EDGES AND BURS SHALL BE POLISHED SMOOTH TO ACHIEVE ARC TRANSITION. THE WELD JOINTS SHALL BE FREE OF DEFECTS SUCH AS WELDING SLAG AND SPATTER.
	COATING 2 FOR SAFETY RAIL	RETROREFLECTIVE BLACK-YELLOW PAINT, WITH 20CM-WIDE ALTERNATING STRIPES. BLACK (RAL9004) AND YELLOW(RAL1003) .	2. AFTER THE BASE MATERIAL TREATMENT PASSES THE ACCEPTANCE CHECK, THE FIRST COAT OF PAINT SHALL BE APPLIED WITHIN 8 HOURS TO PREVENT SECONDARY RUSTING. 3. THE PAINT HAS TO BE RESISTANT AGAINST ABRASION AND ULTRAVIOLET RADIATION AND HAS TO BE APPROVED BY THE ENGINEER.
	COATING 3 FOR CURBS	RETROREFLECTIVE BLACK-YELLOW PAINT, WITH 20CM-WIDE ALTERNATING STRIPES. BLACK (RAL9004) AND YELLOW(RAL1003) .	THE PAINT HAS TO BE RESISTANT AGAINST ABRASION AND ULTRAVIOLET RADIATION AND HAS TO BE APPROVED BY THE ENGINEER.



NOTES:
1. THE OUTBOUND'S ABSOLUTE ELEVATION OF \pm 0 IS 6.52M; THE INBOUND'S ABSOLUTE ELEVATION OF \pm 0 IS 5.82M
2. ACCORDING "GEOTECHNICAL INVESTIGATION REPORT FOR MAIN GATE AND FREE ZONE AREA WORKS OF THE CAIO NEW PORT PROJECT IN ANGOLA" APPENDIX : B-2. THE HIGHEST ASTRONOMICAL TIDE LEVEL OF OUTBOUND AREA IS 3.00M, THE LOWEST POINT ELEVATION OF OUTBOUND IS 6.42M, AND THE THICKNESS OF THE GROUND CONSTRUCTION METHOD IS 250MM, WITH A DIFFERENCE OF 3.17M BETWEEN THE TWO.THE HIGHEST ASTRONOMICAL TIDE LEVEL OF INTBOUND AREA IS 1.40M, THE LOWEST POINT ELEVATION OF OUTBOUND IS 5.69M, AND THE THICKNESS OF THE GROUND CONSTRUCTION METHOD IS 250MM, WITH A DIFFERENCE OF 4.04M BETWEEN THE TWO. THE GROUND CUSHION LAYER IS MUCH HIGHER THAN THE GROUNDWATER LEVEL LINE .
3.THE MAIN STEEL ELEMENTS (SUCH AS STEEL COLUMNS, STEEL BEAMS, ROOF PURLINS, WALL PURLINS-) SHOULD BE DERUSTED IN THE FACTORY. THE STEEL COMPONENTS OF THE BUILDING AND THE EXPOSED METAL COMPONENTS OF THE BUILDING ALL MEET THE C5 ANTI-CORROSION REQUIREMENTS. THE NDOT OF THE ANTI-CORROSION PAINT SHOULD BE \geq 240 μ m, INCLUDING 70 μ m OF PRIMER, 70 μ m OF INTERMEDIATE COATING, AND 100 μ m OF FINAL COAT.
4.ALL GALVANIZING WORKS WHERE SPECIFIED SHALL BE HOT-DIP GALVANIZED AND SHALL CONFORM TO THE REQUIREMENTS OF EN ISO 1461:2009. THE MINIMUM COATING THICKNESS IS 85 μ m(STEEL 5MM THICK AND OVER). THE MINIMUM COATING THICKNESS IS 64 μ m (STEEL UNDER 5MM THICK BUT NOT LESS THAN 2MM).
5.THE DETAILED ROOFING SYSTEM (SOLAR PANELS SUPPORTS INCLUDED) WILL BE PREPARED AND DETAILED BY THE SUPPLIER,AND ITS METAL COMPONENTS SHOULD MEET THE C5 CORROSION RESISTANCE REQUIREMENTS, FASTENERS SHOULD BE EFFECTIVELY SECURED AND FIRMLY FIXED. THE WATERPROOF LEVEL AND PERFORMANCE OF SEALING COMPONENTS OF SOLAR SUPPORTS SHOULD BE CONSISTENT WITH THAT OF THE ROOF, AND THE ORIGINAL WATERPROOF SYSTEM SHOULD NOT BE DAMAGED.
6.THE RAINWATER PIPE IS MADE OF GALVANIZED STEEL, THE DRAWINGS WILL BE PREPARED AND DETAILED BY THE SUPPLIER. THE ANTI-CORROSION PERFORMANCE SHOULD BE C5 GRADE. THE RAINWATER PIPE CLAMP IS MADE OF METAL AND CAN FIRMLY FIX THE RISER WITH A SPACING OF LESS THAN 1,500MM.
7.STEEL COMPONENTS SUCH AS ROOF PURLINS AND STRUCTURAL BEAMS FOR STEEL STRUCTURES OF THE BUILDING WILL BE FINALIZED BY THE SUPPLIER IN THE FORM OF MANUFACTURING DRAWINGS AND CONFIRMED BY THE CONSULTANT BEFORE PURCHASE ORDERS CAN BE PLACED AND CONSTRUCTION CAN COMMENCE.
8. THE SANITARY WARES AND EQUIPMENT IN THE KITCHEN AND BATHROOM SHALL BE DETERMINED BY THE MANUFACTURER IN THE FORM OF SHOP DRAWINGS, INCLUDING THE CHARACTERISTICS OF THE MATERIALS IN TERMS OF DURABILITY, IMPACT RESISTANCE, WATER RESISTANCE, CHEMICAL RESISTANCE AND FIRE RESISTANCE.

Engineer Approval Codes				
Code Nr	Condition	Signature Employer's Representative	Date	
Code 1	Noted Work may proceed.			
Code 2	Noted with comments Work may proceed.			
Code 3	Rejected Work may not proceed. Revise and resubmit.			
01	Revised according to RAD-CRBC-136(ARCH Part)	22/03/2025	L - 1111	
00	First Submittals	20/12/2024	L - 1111	
REVISION	DESCRIPTION	DATE	CHECKED	
EMPLOYER				
		Caioporto S.A. Avenida Comandante Gika n °150 CP 1276 Sagrada Familia Luanda, Angola		
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PROJECT				
The Project of the New Port of Caio in Cabinda				
DRAWING TITLE				
Onshore Buildings_Main Gate Engineering Practice Table				
	DESIGNED BY	DRAWN BY	CHECKED BY	SCALE
DATE	20/03/2025	20/03/2025	22/03/2025	
NAME	张书	张书	L - 1111	1:100
DESIGN STAGE	DETAILED DESIGN			
				LOT1_DD_1020-A-01