



Tessler NR:

569-DB07-AIC-360-004

CLIENT NR:

PRD-AIC-LIS-042

CLIENT:

TAKEDA/BAXALTA

PROJECT / AREA: BURITI EPCMV PROJECT

DETAIL DESIGN

BILL OF MATERIAL FIRE ALARM

0	21OCT2021	ISSUE FOR CONSTRUCTION	MAB	MAF	RSP
A	24JUN2021	90% DD ISSUE	MAB	MAF	RSP
REV	DATE	DESCRIPTION	EXEC.	CHECK	APPROV.

Tessler NR: **569-DB07-AIC-360-004**CLIENT NR: **PRD-AIC-LIS-042**





TITLE:





SHEET:
2 de 17**BILL OF MATERIAL FIRE ALARM**REV.:
0**NOTAS:**





- 1) The current Bill of Material covers the necessary requirements for the Fire Alarm system of the BURITI Project.
- 2) The construction concepts detailed hereof consider the labor and materials to properly execute the design and design intent detailed in the drawings and specifications as delivered.
- 3) This list is delivered like an illustrative form for the principal activities that are required. The Contractor is responsible to comply with the specified design and design intent.
- 4) The Contractor is responsible to supervise and report in the delivered document if anomalies exist or any extra materials are required and their quantities.
- 5) The brands and specifications for the materials and equipment will not be changed nor modified unless it is approved in written by the Takeda/Baxalta; therefore the Contractor must consider lead times on the materials and equipment.
- 6) The Contractor is responsible for the means and methods required to comply with the design and design intent. The execution of the work must comply with country and Hemobrás safety regulations.
- 7) The Contractor must consider the quoting of all materials, miscellaneous, and consumables like screws, anchors, connection caps, lubricants, insulating tape, and any other material to complete the work according to the design and design intent.
- 8) The Contractor will be responsible for the order and cleaning of all construction and storage areas, removing as well any excess materials and trash generated during the working period.
- 9) IPS/Tessler does not assume any responsibility for the construction quantities that the Contractor states thereof; it is the responsibility of the Contractor to consider the proper quantities based on the design and design intent.
- 10) Failure to identify discrepancies or omissions immediately shall be understood to indicate the Contractor's acceptance and full compliance with the design and design intent.
- 11) Takeda/Baxalta, Takeda/Baxalta's Representative and Architect/Engineer of Record will not consider, for any purpose, any claim of the bidder for any error or omission in the bid.





REVISION 0 NOTES





1. ADDED NCA-2 FOR B07A AND WWT
2. ADDED UTP CABLES FOR NCA-2 OF B07 AND WWT
3. UPDATED QUANTITIES
4. ADDED DEVICES AND MATERIAL FOR BUILDING 7F





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:				SHEET: 3 de 17	
BILL OF MATERIAL FIRE ALARM				REV.: 0	
ID	DESCRIPTION	UNIT	QTY		
BUILDING 7A					
1	FIRE ALARM CONTROL PANEL CAPACITY: 3.180 TOTAL DEVICES; 159 DETECTORS/159 MODULES PER SLC REMARKS: COMMON FOR BUILDING 7A, 7B, 7C, 7F, WWT. 2x SLC WILL BE PROVIDED MANUFACTURER: NOTIFIER MODEL: CPU2-3030D-PO	Pc	1		
2	FACP BOM PARTS DIMENSION: 727 x 613 x 170mm REMARKS:BOX FOR HOUSING FACP, B SERIES, RED, TWO BAYS, CAB-4 SERIES ENCLOSURES MANUFACTURER: NOTIFIER MODEL: SBB-B4R	Pc	1		
3	FACP BOM PARTS DIMENSION: N/A REMARKS:PANEL CHASSIS SBB-B4R MANUFACTURER: NOTIFIER MODEL: DR-B4R	Pc	1		
4	FACP BOM PARTS REMARKS: POWER SUPPLY 220 VAC, 50/60Hz, 2.5 A MANUFACTURER: NOTIFIER MODEL: AMPS-24	Pc	1		
5	FACP BOM PARTS REMARKS:LOOP CONTROL MODULE MANUFACTURER: NOTIFIER MODEL: LCM-320	Pc	1		
6	FACP BOM PARTS REMARKS:LOOP EXPANDER MODULE MANUFACTURER: NOTIFIER MODEL: LEM-320	Pc	1		
7	FACP BOM PARTS REMARKS: BLANK MODULE PLATE MANUFACTURER: NOTIFIER MODEL: BMP-1	Pc	2		
8	FACP BOM PARTS REMARKS: BACNET GATEWAY MANUFACTURER: NOTIFIER MODEL: BACNET-GW-3	Pc	1		
9	FACP BOM PARTS REMARKS: NETWORK COMMUNICATIONS MODULE. 1x BACNET GATEWAY + 1x NFS2-3030 CONTROL PANEL MANUFACTURER: NOTIFIER MODEL: NCM-F	Pc	2		
10	FACP BOM PARTS REMARKS: BACNET MOUNTING CHASSIS MANUFACTURER: NOTIFIER MODEL: CHS-4L	Pc	1		
11	FACP BOM PARTS REMARKS: BATTERY 30min in alam/ 24h in standby MODEL: BATTERY 18AH	Pc	2		
12	FACP BOM PARTS REMARKS: FRONT PLATE (LOWER LEVEL) FOR BATTERY PROTECTION MANUFACTURER: NOTIFIER MODEL: BP2-4	Pc	1		





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 4 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
13	ADDRESSABLE MANUAL PULL STATION REMARKS: Addressable NBG-12L Pull Station; with FlashScan. Portuguese. Already have monitor module inside MANUFACTURER: NOTIFIER MODEL: NBG-12LXP	Pc	35		
14	AUXILIAR POWER SUPPLY TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: FCPS-24S8	Pc	1		
15	ADDRESSABLE SMOKE DETECTOR TYPE: PHOTOELECTRIC CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: FSP-951	Pc	276		
16	ADDRESSABLE HEAT DETECTOR TYPE: THERMAL CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: FST-951	Pc	8		
17	Standard Base TYPE: N/A CAPACITY: DIMENSIONS: MATERIAL: REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: B501-WHITE	Pc	284		
18	Addressable Smoke detector by laser beam TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: FIRE DETECTOR ADDRESSABLE BY LASER, FLASHSCAN - NOTIFIER MANUFACTURER: NOTIFIER MODEL: FSL-751	Pc	7		
19	Base for FSL-751 TYPE: DUCT CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Duct detector base (Does not include detector) MANUFACTURER: MODEL: DNR	Pc	7		
20	Sample Pipe TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: 5" sampling tube MANUFACTURER: NOTIFIER MODEL: DST5	Pc	7		





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 5 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
21	Isolator module TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Isolator module MANUFACTURER: NOTIFIER MODEL: ISOX	Pc	27		
22	INTELLIGENT RELAY MODULES TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: FRM-1	Pc	96		
23	INTELLIGENT MONITOR MODULES TYPE: CAPACITY: DIMENSIONS: MATERIAL: REMARKS: MANUFACTURER: NOTIFIER MODEL: FMM-1	Pc	13		
24	WALL HORN STROBES TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: P2RL	Pc	26		
25	FLOW SWITCH TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: FLUK MODEL: F-01 SPRINK	Pc	6		
26	TAMPER SWITCH TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: HONEYWELL MODEL: OSY2	Pc	6		
27	PRESSURE SWITCH TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: POTTER MODEL: PS10-2	Pc	1		





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 6 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
28	NETWORK CONTROL ANNUNCIATOR CAPACITY: ENHANCED FORMAT 640-CHARACTER LCD DISPLAY WITH BACKLIGHTING REMARKS: COMMON FOR BUILDING 7A, 7B, 7C, 7F, WWT. MANUFACTURER: NOTIFIER MODEL: NCA-2	Pc	1		
29	NCA BOM PARTS REMARKS: POWER SUPPLY 220 VAC, 50/60Hz, 2.5 A MANUFACTURER: NOTIFIER MODEL: AMPS-24	Pc	1		
30	NCA BOM PARTS REMARKS: BATTERY 30min in alarm/ 24h in standby MODEL: BATTERY 18AH	Pc	1		
31	NCA BOM PARTS REMARKS: FRONT PLATE (LOWER LEVEL) FOR BATTERY PROTECTION MANUFACTURER: NOTIFIER MODEL: BP2-4	Pc	1		
MATERIAL 7A					
1	GALVANIZED STEEL CONDUIT, WITH MALE THREAD NPT TYPE ENDS NOMINAL DIAMETER OF 21MM (3/4"), IN SECTIONS OF 3 METERS,	SECTION	700		
2	90° CURVE IN APPARENT GALVANIZED IRON Ø3/	Pc	364		
3	CONDUIT CONICAL BOX TERMINAL Ø3/4"	Pc	364		
4	CONDUIT CONICAL BOX "LL" Ø3/4" WITH FRONT ACCESS TO MIRROR	Pc	364		
5	FLEXIBLE METAL DUCT Ø 3/4" WITHOUT PVC COVER	M	364		
6	CABLE TWISTED PAIR, 1x(2 x 2.5 mm²) , FOR FIRE ALARM ANNEL NBR 17240, 215IBF, HIPPERFIO. WITH RD OVERALL INSULATION, PAIR WITH ONE CABLE WITH RED INSULATION, ONE CABLE WITH BLACK CABLE INSULATION, OVERALL SHIELD 100% COVERAGE WITH STRANDED TC DRAIN WIRE, RESISTANT TO SUNLIGHT AND CHEMICALS	M	6900		
7	COPPER CABLE, FOR POWER SYSTEM, VOLTAGE CLASS 0.6/1kV-90oC, 3 CONDUCTORS, CONSTITUTED OF ELECTROLYTIC COPPER WIRE, CLASS 5 STRIPING, W/ INSULATION IN HEPR RUBBER COMPOUND AND FAMBLE PVC COVER (3C# 2.5mm²). REFERENCE: EPROTENAX GSETTE, MANUFACTURER: PRYSMIAN	M	80		
8	COPPER CABLE, FOR POWER SYSTEM, VOLTAGE CLASS 0.6/1kV-90oC, 3 CONDUCTORS, CONSTITUTED OF ELECTROLYTIC COPPER WIRE, CLASS 5 STRIPING, W/ INSULATION IN HEPR RUBBER COMPOUND AND FAMBLE PVC COVER (3C# 4mm²). REFERENCE: EPROTENAX GSETTE, MANUFACTURER: PRYSMIAN	M	900		
9	CABLE UTP-4 COUPLE 100OHMS CATEGORY 6A	M	120		





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 7 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
10	CONDUIT CONNECTOR PLATE Ø3/4"	Pc	1000		
11	RAWLPLUG NYLON HEX NUT Ø3/8" WITH HEX SCREW	Pc	2000		
12	HEX NUT FLAT ROUND WASHER Ø 3/8"	Pc	4000		
13	CLAMP TYPE "D" IRON STEEL GALVANIZED Ø3/4" WITH HEX BOLT AND FLAT WASHER	Pc	1000		
14	THREADED ROAD (Ø 3/8") 10mm X 3000mm LENGHT	SECTION	700		





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 8 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
BUILDING 7B					
1	VERY EARLY FIRE ALARM TYPE: ASPIRATION CAPACITY: 250m ² REMARKS: ADD 03 FMM-101 for supervision, 01 FRM-1 for Global Reset Power it up straight to FACP-PW. It can be powered 18-30Vdc and consumes 220 mA nominal, 295mA in alarm DIMENSION: 255mm W x 185mm H x 90mm D MANUFACTURER: NOTIFIER MODEL: VLF-250	Pc	1		
2	VEFA PARTS TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Mini supervision module MANUFACTURER: NOTIFIER MODEL: FMM-101	Pc	5		
3	VEFA PARTS TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Relay module MANUFACTURER: NOTIFIER MODEL: FRM-101	Pc	1		
4	Release zone parts TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Triac module for release zones, one for manual release station and other for Novec release MANUFACTURER: NOTIFIER MODEL: FCM-1-REL	Pc	2		
5	Release zone parts TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Dual action Releasing station with Abort, red, terminal block, Notifier Key lock. Requires 01 FCM-1-REL e 02 FMM-101 MANUFACTURER: NOTIFIER MODEL: NBG-12LRA	Pc	1		
6	Release zone parts TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Pre-Alarm Horn for Novec Release Requires 01 FCM-1-REL e 02 FMM-101 MANUFACTURER: NOTIFIER MODEL: P2GWL	Pc	1		





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 9 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
7	ADDRESSABLE MANUAL PULL STATION TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Addressable NBG-12L Pull Station; with FlashScan. Portuguese. Already have monitor module inside MANUFACTURER: NOTIFIER MODEL: NBG-12LXP	Pc	30		
8	AUXILIAR POWER SUPPLY TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: FCPS-24S8	Pc	1		
9	ADDRESSABLE SMOKE DETECTOR TYPE: PHOTOELECTRIC CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: FSP-951	Pc	243		
10	ADDRESSABLE HEAT DETECTOR TYPE: THERMAL CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: FST-951	Pc	6		
11	Standard Base TYPE: N/A CAPACITY: DIMENSIONS: MATERIAL: REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: B501-WHITE	Pc	249		
12	Addressable Smoke detector by laser beam TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: FIRE DETECTOR ADDRESSABLE BY LASER, FLASHSCAN - NOTIFIER MANUFACTURER: NOTIFIER MODEL: FSL-751	Pc	10		
13	Base for FSL-751 TYPE: DUCT CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Duct detector base (Does not include detector) MANUFACTURER: MODEL: DNR	Pc	10		





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 10 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
14	Sample Pipe TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: 5" sampling tube MANUFACTURER: NOTIFIER MODEL: DST5	Pc	10		
15	Isolator module TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Isolator module MANUFACTURER: NOTIFIER MODEL: ISOX	Pc	27		
16	INTELLIGENT RELAY MODULES TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Check the real need to use relay modules. To trigger sirens, use the FCM-1 which is a Triac control module and is EOL Resistor supervised MANUFACTURER: NOTIFIER MODEL: FCM-1	Pc	94		
17	INTELLIGENT MONITOR MODULES TYPE: CAPACITY: DIMENSIONS: MATERIAL: REMARKS: MANUFACTURER: NOTIFIER MODEL: FMM-1	Pc	15		
18	WALL HORN STROBES TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: P2RL	Pc	34		
19	FLOW SWITCH TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: FLUK MODEL: F-01 SPRINK	Pc	5		
20	TAMPER SWITCH TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: HONEYWELL MODEL: OSY2	Pc	5		





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 11 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
21	PRESSURE SWITCH TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: POTTER MODEL: PS10-2	Pc	1		
MATERIAL 7B					
1	GALVANIZED STEEL CONDUIT, WITH MALE THREAD NPT TYPE ENDS NOMINAL DIAMETER OF 21MM (3/4"), IN SECTIONS OF 3 METERS.	SECTION	700		
2	90° CURVE IN APPARENT GALVANIZED IRON Ø3/4"	Pc	231		
3	CONDUIT CONICAL BOX TERMINAL Ø3/4"	Pc	231		
4	CONDUIT CONICAL BOX "LL" Ø3/4" WITH FRONT ACCESS TO MIRROR	Pc	231		
5	FLEXIBLE METAL DUCT Ø 3/4" WITHOUT PVC COVER	M	231		
6	CABLE TWISTED PAIR, 1x(2 x 2.5 mm²) , FOR FIRE ALARM ANNEL NBR 17240, 215IBF, HIPPERFIO. WITH RD OVERALL INSULATION, PAIR WITH ONE CABLE WITH RED INSULATION, ONE CABLE WITH BLACK CABLE INSULATION, OVERALL SHIELD 100% COVERAGE WITH STRANDED TC DRAIN WIRE, RESISTANT TO SUNLIGHT AND CHEMICALS	M	7140		
7	COPPER CABLE, FOR POWER SYSTEM, VOLTAGE CLASS 0.6/1kV-90oC, 3 CONDUCTORS, CONSTITUTED OF ELECTROLYTIC COPPER WIRE, CLASS 5 STRIPING. W/ INSULATION IN HEPR	M	900		
8	CONDUIT CONNECTOR PLATE Ø3/4"	Pc	1000		
9	RAWLPLUG NYLON HEX NUT Ø3/8" WITH HEX SCREW	Pc	2000		
10	HEX NUT FLAT ROUND WASHER Ø 3/8"	Pc	4000		
11	CLAMP TYPE "D" IRON STEEL GALVANIZED Ø3/4" WITH HEX BOLT AND FLAT WASHER	Pc	1000		
12	THREADED ROAD (Ø 3/8") 10mm X 3000mm LENGHT	SECTION	700		





 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 12 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
BUILDING 7C					
1	ADDRESSABLE MANUAL PULL STATION TYPE: N/A CAPACITY: N/A DIMENSION : N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: NBG-12LX	Pc	1		
2	ADDRESSABLE SMOKE DETECTOR TYPE: PHOTOELECTRIC CAPACITY: N/A DIMENSION : N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: FSP-951	Pc	3		
3	ADDRESSABLE HEAT DETECTOR TYPE: THERMAL CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: FST-951	Pc	4		
4	Standard Base TYPE: N/A CAPACITY: DIMENSIONS: MATERIAL: REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: B501-WHITE	Pc	7		
5	ADDRESSABLE GAS DETECTOR TYPE: NGV CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Standard base for detectors MANUFACTURER: HONEYWELL MODEL: Sensepoint XCD	Pc	1		
6	INTELLIGENT MONITOR MODULES TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: FMM-1	Pc	1		
7	WALL HORN STROBES TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: P2RL	Pc	1		

 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 13 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
MATERIAL - BUILDING 7C					
1	GALVANIZED STEEL CONDUIT, WITH MALE THREAD NPT TYPE ENDS NOMINAL DIAMETER OF 25MM (3/4"), IN SECTIONS OF 3 METERS.	SECTION	32		
2	90° CURVE IN APPARENT GALVANIZED IRON Ø3/4"	Pc	10		
3	CONDUIT CONICAL BOX TERMINAL Ø3/4"	Pc	10		
4	CONDUIT CONICAL BOX "LL" Ø3/4" WITH FRONT ACCESS TO MIRROR	Pc	10		
5	FLEXIBLE METAL DUCT Ø 3/4" WITHOUT PVC COVER	M	10		
6	CABLE TWISTED PAIR, 1x(2 x 2.5 mm²) , FOR FIRE ALARM ANNEL NBR 17240, 215IBF, HIPPERFIO. WITH RD OVERALL INSULATION, PAIR WITH ONE CABLE WITH RED INSULATION, ONE CABLE WITH BLACK CABLE INSULATION, OVERALL SHIELD 100% COVERAGE WITH STRANDED TC DRAIN WIRE, RESISTANT TO SUNLIGHT AND CHEMICALS	M	90		
7	COPPER CABLE, FOR POWER SYSTEM, VOLTAGE CLASS 0.6/1kV-90oC, 3 CONDUCTORS, CONSTITUTED OF ELECTROLYTIC COPPER WIRE, CLASS 5 STRIPING, W/ INSULATION IN HEPR RUBBER COMPOUND AND FAMBLE PVC COVER (3C# 4mm²). REFERENCE: EPROTENAX GSETTE, MANUFACTURER: PRYSMIAN	M	90		
8	CONDUIT CONNECTOR PLATE Ø3/4"	Pc	16		
9	RAWLPLUG NYLON HEX NUT Ø3/8" WITH HEX SCREW	Pc	32		
10	HEX NUT FLAT ROUND WASHER Ø 3/8"	Pc	64		
11	CLAMP TYPE "D" IRON STEEL GALVANIZED Ø3/4" WITH HEX BOLT AND FLAT WASHER	Pc	32		
12	THREADED ROAD (Ø 3/8") 10mm X 3000mm LENGHT	SECTION	8		

 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 14 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
BUILDING 7F					
1	ADDRESSABLE MANUAL PULL STATION TYPE: N/A CAPACITY: N/A DIMENSION : N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: NBG-12LX	Pc	1		
2	ADDRESSABLE SMOKE DETECTOR TYPE: PHOTOELECTRIC CAPACITY: N/A DIMENSION : N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: FSP-951	Pc	1		
3	ADDRESSABLE HEAT DETECTOR TYPE: THERMAL CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: FST-951	Pc	9		
4	Standard Base TYPE: N/A CAPACITY: DIMENSIONS: MATERIAL: REMARKS: Standard base for detectors MANUFACTURER: NOTIFIER MODEL: B501-WHITE	Pc	10		
5	WALL HORN STROBES TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: N/A MANUFACTURER: NOTIFIER MODEL: P2RL	Pc	1		
MATERIAL - BUILDING 7F					
1	GALVANIZED STEEL CONDUIT, WITH MALE THREAD NPT TYPE ENDS NOMINAL DIAMETER OF 25MM (3/4"), IN SECTIONS OF 3 METERS,	SECTION	20		
2	90° CURVE IN APPARENT GALVANIZED IRON Ø3/4"	Pc	30		
3	CONDUIT CONICAL BOX TERMINAL Ø3/4"	Pc	60		
4	CONDUIT CONICAL BOX "LL" Ø3/4" WITH FRONT ACCESS TO MIRROR	Pc	240		
5	FLEXIBLE METAL DUCT Ø 3/4" WITHOUT PVC COVER	M	10		

 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 15 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
6	CABLE TWISTED PAIR, 1x(2 x 2.5 mm²) , FOR FIRE ALARM ANNEL NBR 17240, 215IBF, HIPPERFIO. WITH RD OVERALL INSULATION, PAIR WITH ONE CABLE WITH RED INSULATION, ONE CABLE WITH BLACK CABLE INSULATION, OVERALL SHIELD 100% COVERAGE WITH STRANDED TC DRAIN WIRE, RESISTANT TO SUNLIGHT AND CHEMICALS	M	90		
7	COPPER CABLE, FOR POWER SYSTEM, VOLTAGE CLASS 0.6/1kV-90oC, 3 CONDUCTORS, CONSTITUTED OF ELECTROLYTIC COPPER WIRE, CLASS 5 STRIPING, W/ INSULATION IN HEPR RUBBER COMPOUND AND FAMBLE PVC COVER (3C# 4mm²). REFERENCE: EPROTENAX GSETTE, MANUFACTURER: PRYSMIAN	M	90		
8	CONDUIT CONNECTOR PLATE Ø3/4"	Pc	16		
9	RAWLPLUG NYLON HEX NUT Ø3/8" WITH HEX SCREW	Pc	32		
10	HEX NUT FLAT ROUND WASHER Ø 3/8"	Pc	64		
11	CLAMP TYPE "D" IRON STEEL GALVANIZED Ø3/4" WITH HEX BOLT AND FLAT WASHER	Pc	32		
12	THREADED ROAD (Ø 3/8") 10mm X 3000mm LENGHT	SECTION	8		

 			 		
Tessler NR 569-DB07-AIC-360-004			CLIENT NR: PRD-AIC-LIS-042		
TITLE:					SHEET: 16 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
WASTE WATER TREATMENT PLANT (WWT)					
1	ADDRESSABLE MANUAL PULL STATION TYPE: N/A CAPACITY: N/A DIMENSIONS: N/A MATERIAL: N/A REMARKS: PULL STATION FOR OUTDOOR APPLICATIONS MANUFACTURER: NOTIFIER MODEL: NBG-12LOB	Pc	1		
2	NETWORK CONTROL ANNUNCIATOR CAPACITY: ENHANCED FORMAT 640-CHARACTER LCD DISPLAY WITH BACKLIGHTING REMARKS: COMMON FOR BUILDING 7A, 7B, 7C, 7F, WWT. MANUFACTURER: NOTIFIER MODEL: NCA-2	Pc	1		
3	NCA BOM PARTS REMARKS: POWER SUPPLY 220 VAC, 50/60Hz, 2.5 A MANUFACTURER: NOTIFIER MODEL: AMPS-24	Pc	1		
4	NCA BOM PARTS REMARKS: BATTERY 30min in alam/ 24h in standby MODEL: BATTERY 18AH	Pc	1		
5	NCA BOM PARTS REMARKS: FRONT PLATE (LOWER LEVEL) FOR BATTERY PROTECTION MANUFACTURER: NOTIFIER MODEL: BP2-4	Pc	1		
MATERIAL - WASTE WATER TREATMENT PLANT (WWT)					
1	GALVANIZED STEEL CONDUIT, WITH MALE THREAD NPT TYPE ENDS NOMINAL DIAMETER OF 21MM (3/4"), IN SECTIONS OF 3 METERS,	SECTION	3		
2	90° CURVE IN APPARENT GALVANIZED IRON Ø3/4"	Pc	1		
3	CONDUIT CONICAL BOX TERMINAL Ø3/4"	Pc	1		
4	CONDUIT CONICAL BOX "LL" Ø3/4" WITH FRONT ACCESS TO MIRROR	Pc	1		
5	FLEXIBLE METAL DUCT Ø 3/4" WITHOUT PVC COVER	M	1		
6	CABLE TWISTED PAIR, 1x(2 x 2.5 mm²) , FOR FIRE ALARM ANNEL NBR 17240, 215IBF, HIPPERFIO. WITH RD OVERALL INSULATION, PAIR WITH ONE CABLE WITH RED INSULATION, ONE CABLE WITH BLACK CABLE INSULATION, OVERALL SHIELD 100% COVERAGE WITH STRANDED TC DRAIN WIRE, RESISTANT TO SUNLIGHT AND CHEMICALS	M	1200		
7	CONDUIT CONNECTOR PLATE Ø3/4"	Pc	6		
8	RAWLPLUG NYLON HEX NUT Ø3/8" WITH HEX SCREW	Pc	12		
9	HEX NUT FLAT ROUND WASHER Ø 3/8"	Pc	48		

 		 			
Tessler NR 569-DB07-AIC-360-004		CLIENT NR: PRD-AIC-LIS-042			
TITLE:					SHEET: 17 de 17
BILL OF MATERIAL FIRE ALARM					REV.: 0
ID	DESCRIPTION	UNIT	QTY		
10	CLAMP TYPE "D" IRON STEEL GALVANIZED Ø3/4" WITH HEX BOLT AND FLAT WASHER	Pc	6		
11	THREADED ROAD (Ø 3/8") 10mm X 3000mm LENGHT	SECTION	1		
CABLE FOR B07-FACP-01 TO LINK-HEMOBRÁS					
1	MULTIMODE OPTICAL FIBER 6 STRANDS. INTERIOR AND EXTERIOR USE. JACKET COLOR: BLACK. LOOSE TUBE DRY. 4 STRANDS. CORE: 50/125µM. JACKET: LSZH. CATEGORY OM4. EXTERNAL DIAMETER: 0.47IN (12MM). INSTALL STRAIN: 3000N. WAVELENGTH: 850 – 1300NM. OPTICAL ATTENUATION: 850NM: 3.5DB/KM / 1300NM: 1.5DB/KM. OPERATION TEMPERATURE: -4 TO 158°F (-20 A 70°C). MANUFACTURER: FURUKAWA	M	950		