

SECURITY SYSTEM FUNCTION SUMMARY

- OVERVIEW**
 - THE CAMPUS SECURITY SYSTEM IS BUILT ON GENETEC SECURITY CENTER (SC), LEVERAGING ITS FEDERATION™ FEATURE TO INTERCONNECT BUILDINGS 1, 2, 3 & FEDERATION JOINS THE INDEPENDENT CSC SYSTEMS INTO A SINGLE VIRTUAL PLATFORM, ENABLING CENTRALIZED MONITORING, REPORTING AND MANAGEMENT, AND INCIDENT RESPONSE WHILE MAINTAINING LOCAL AUTONOMY AT EACH SITE. EACH FACILITY OPERATES ITS CONTROL FUNCTIONS INSTANTLY WITH A DEDICATED CSC LICENSE, WHICH FEDERATES DATA IN REAL-TIME TO THE PRIMARY SYSTEM. THIS ARCHITECTURE SUPPORTS STREAMLINED OPERATIONS ACROSS DISTRIBUTED SITES, REDUCES SINGLE POINTS OF FAILURE, AND ENSURES COMPLIANCE WITH INDUSTRY STANDARDS SUCH AS THOSE OUTLINED IN FEDERAL SECURITY MODULES (SCM) AND FEDERAL SECURITY STANDARDS. THE SYSTEM ALSO ALIGNS WITH TENANT'S CO-LOCATION SECURITY STANDARDS FOR FACILITY ACCESS, VIDEO SURVEILLANCE, AND REGULATORY REPORTING.
- CORE SECURITY SYSTEMS**
 - ACCESS CONTROL
 - SERVES AS THE PRIMARY INTEGRATION HUB WITHIN GENETEC SECURITY CENTER.
 - EACH BUILDING (1-4) HOSTS AN INDEPENDENT CSC INSTANCE FOR LOCAL ACCESS MANAGEMENT, WITH FEDERATION SYNCHRONIZING DATA TO THE CSC FOR UNIFORM OVERSIGHT.
 - MANAGES ENTRY/EXIT POINTS ACROSS ALL FACILITIES, INCLUDING BADGE VALIDATION, DOOR CONTROLS, AND EVENT LOGGING.
 - LOCAL USERS HAVE PERMISSIONS TO VIEW AND MANAGE THEIR SPECIFIC FACILITY CSC OPERATIONS WHILE MAINTAINING GLOBAL AUTHORITY TO MONITOR AND ADMINISTER ALL SITES.
 - FULL INTEGRATION WITH OTHER CSC MODULES AND THIRD-PARTY SYSTEMS, INCLUDING VIDEO MANAGEMENT FOR EVENT-TRIGGERED PLAYBACK, INTERCOM FOR REMOTE DOOR RELEASE, KEY MANAGEMENT FOR AUDIT TRAILS, AND INTRUSION DETECTION (FOR ALARM CORRELATION).
 - SUPPORTS FEDERATED REPORTING FOR COMPLIANCE AUDITS, ENSURING ADHERENCE TO STANDARDS LIKE ISO 27001 AND PCI DSS AS PER TENANT REQUIREMENTS.
 - VIDEO MANAGEMENT SYSTEM (VMS)
 - UTILIZES GENETEC'S ONICAST™ MODULE WITHIN SECURITY CENTER TO MONITOR INTERCOM AND EXTENDER CAMERA CAMPIV-WHO ROUTE DIRECTLY TO THE CONCERNING BUILDING FOR INITIAL Triage.
 - BUILDING OPERATORS CAN RESOLVE REMOTELY (E.G., VIA VIDEO VERIFICATION AND DOOR RELEASE) OR ESCALATE TO LOCAL BUILDING SECURITY STAFF.
 - LOSS INCIDENTS IN THE FEDERATED CSC DATABASE, ENSURING TRACEABILITY PER TENANT'S SECURITY INCIDENT REPORTING REQUIREMENTS.
 - KEY MANAGEMENT
 - TRACKS PHYSICAL KEY ISSUANCE, RETURNS, AND USAGE ACROSS THE CAMPUS USING INTEGRATED KEY CONTROL SYSTEMS (E.G., COMPATIBLE WITH GENETEC'S ECOSYSTEM).
 - USERS ACCESS KEYS VIA BADGE SWIPE, WITH EVENTS LOGGED DIRECTLY INTO THE CSC ACCESS CONTROL MODULE.
 - FEDERATION PROVIDES THE PRIMARY SYSTEM WITH REAL-TIME VISIBILITY AND AUDIT TRAILS FOR ALL KEY ACTIVITIES.
 - COMPLIES WITH TENANT'S ASSET PROTECTION STANDARDS, INCLUDING ACCOUNTABILITY FOR HARDWARE ASSETS.
- OPERATIONAL ARCHITECTURE**
 - BUILDING LEVEL SYSTEMS (1, 2, 3, 4)
 - REAL-TIME FEDERATION OF EVENTS, ALARMS, LOGS, AND ENTITY DATA (E.G., USERS, DOORS, CAMERAS) TO THE CSC.
 - MAINTAINS OPERABILITY DURING NETWORK DISRUPTIONS, WITH LOCAL STORAGE AND SYNCHRONIZATION UPON RECONNECTION.
 - COMPLIES WITH TENANT'S SECURITY REQUIREMENTS, INCLUDING BACKGROUND CHECKS FOR PERSONNEL AND ACCESS CONTROLS.
- SERVERFARM PRIMARY FEDERATION SERVER :**
 - HOSTS THE CENTRAL FEDERATION™ ROLE, AGGREGATING DATA FROM ALL SITES INTO A UNIFIED DASHBOARD.
 - PRIORITIZES INCOMING INTERCOM AND RADIO TRAFFIC FOR RAPID Triage.
 - PROVIDES FULL SITUATIONAL AWARENESS, INCLUDING CROSS-SITE ENTITY SEARCH, ALARM CORRELATION, AND REPORTING.
 - CONFIGURED WITH FEDERATION USER CREDENTIALS FOR SECURE CONNECTIONS TO REMOTE SYSTEMS.
 - ENSURES DISASTER RECOVERY THROUGH ANNUAL BCP TESTING, AS MANDATED BY TENANT STANDARDS.

SECURITY EQUIPMENT LIST				
TAG	DESCRIPTION	COLOR/FINISH	MFG	MODEL #
ACCESS CONTROL SYSTEM				
A001	SYSTEM CONTROLLER/SERVER	NA	GENETEC	SECURITY CENTER
A002	INTELLIGENT GATEWAY APPLIANCE (2 REQUIRED)	NA	GENETEC	SYNERGS CLOUD LINK
A003	SOFTWARE LICENSE - CLIENT WORKSTATION	NA	GENETEC	GSC-IU
A004	SOFTWARE LICENSE - SADOONG	NA	GENETEC	INCLUDED IN SYNERGS
A005	SOFTWARE LICENSE - BIOMETRIC READER INTERFACE	NA	GENETEC	SDK FOR SUPREMA
A006	SOFTWARE LICENSE - CLOUD INCLUDED WITH APPLIANCE	NA	GENETEC	(VERIFY)
A007	SOFTWARE LICENSE - FEDERATED SITE LICENSE	NA	GENETEC	GTC-GSC-ISCDF
A008	SOFTWARE LICENSE - GLOBAL CARD HOLDER MANAGER	NA	GENETEC	GTC-GSC-SY-E-10GMH
A009	SOFTWARE SUPPORT AGREEMENT	NA	GENETEC	ADV-RDU-P-1Y
AC10	TRAINING (1 SEAT) BY GENETEC	NA	GENETEC	SC-STC-001
AC11	SYSTEM NETWORK NODE	NA	MERCURYGENETEC	MP4902
AC12	DUAL READER INTERFACE	NA	MERCURYGENETEC	MRS2
AC13	SINGLE READER INTERFACE	NA	MERCURYGENETEC	MR50
AC14	INPUT BOARD - 16 IN	NA	MERCURYGENETEC	MR16OUT
AC15	OUTPUT BOARD - 16 OUT	NA	MERCURYGENETEC	MR16OUT
AC16	POWER SUPPLY	NA	ALTRONX	TROVE SERIES
AC17	ENCLOSURE	NA	ALTRONX	TROVE SERIES
AC18	BATTERY 12V/7AH	NA	YUSUA	NP7-12
AC19	STANDARD CARD READER - NO KEYPAD	VERIFY	HD	SCGN-40
AC20	MILLION MOUNT CARD READER - NO KEYPAD	VERIFY	HD	SCGN-20
AC21	BIOMETRIC FINGER PRINT READER	VERIFY	SUPREMA	BEVZ-04P8
AC22	BIOMETRIC SOFTWARE (EP TO 100 DEVICES)	NA	BIOMETEC	PRO
AC23	REQUEST TO EXIT MOTION	VERIFY	BOSCH	DS160
AC24	DOOR CONTACT (FLUSH MOUNT) (GE 2076)	VERIFY	GR	194-12
AC25	DOOR CONTACT (SURFACE MOUNT) (GE 2054)	NA	GR	4523-36
AC26	GATE CONTACT	NA	GR	4400
AC27	DOOR LOCAL ALARM	NA	DSI	EAK-115K
AC28	CARDS	—	HD	CORPORATE 1000
AC29	BADGE PRINTER WITH ETHERNET MODULE	NA	FARGO	DTC-450E
AC30	BADGE PRINTER RIBBONS FOR 250 CARDS	NA	FARGO	4800
AC31	NON-TECHNOLOGY CARDS WITH ADHESIVE BACKING	NA	—	—
AC32	BADGE PRINTER CLEANING KIT	NA	FARGO	86177
VISITOR MANAGEMENT SYSTEM				
VM1	VISITOR MANAGEMENT SYSTEM (OFO)	NA	NA	IN COMMAND
VIDEO INTERCOM SYSTEM				
I001	VIDEO INTERCOM DUAL STATION (BUILDING)	VERIFY	ZENITEL	TCV-3*
I002	EXTERIOR SURFACE MOUNT BOX	NA	ZENITEL	TA-1
I003	INTERIOR FLUSH MOUNT BOX	NA	ZENITEL	TA-18
I004	VIDEO INTERCOM DESK STATION	BLACK	ZENITEL	ITSV-6
I005	SOFTWARE LICENSE (FOR INTEGRATION)	NA	GENETEC	GSC-SPIELA-BASE
I006	SOFTWARE LICENSE (PER INTERCOM)	NA	GENETEC	GSC-SPIELA-15P-ADV
VIDEO SURVEILLANCE SYSTEM				
V501	SYSTEM CONTROLLER/SERVER	NA	GENETEC	SECURITY CENTER
V502	SOFTWARE LICENSE	NA	GENETEC	GSC-OME-1C
V503	SOFTWARE SUPPORT AGREEMENT	NA	GENETEC	ADV-CAMF-1Y
V504	TRAINING (1 SEAT) BY GENETEC	NA	GENETEC	SC-STC-001
V505	STORAGE (HARD DRIVE SIZE) VERIFIED BY SECURITY CONTRACTOR	NA	PROVIDED BY OWNER	PROVIDED BY OWNER
V506	CAMERA SD CARD (REQUIRED FOR ALL CAMERAS)	NA	SCANISK	SDXC256GB HIGH ENDURANCE
KEY MANAGEMENT SYSTEM				
KM01	KEY MANAGEMENT DEVICE	NA	SEE NOTE 'SE-1'	BY CONTRACTOR
KM02	KEY MANAGEMENT READER	NA	SEE NOTE 'SE-1'	BY CONTRACTOR
KM03	SOFTWARE LICENSING	NA	SEE NOTE 'SE-1'	BY CONTRACTOR
KM04	SOFTWARE LICENSING	NA	GENETEC	BY CONTRACTOR
SECURITY CABLING				
SC SHALL UPSIZE SECURITY CABLING WIRE GAUGE AS REQUIRED BASED ON FINAL PATHWAY LENGTHS AND VOLTAGE DROP CALCULATIONS. SC SHALL UTILIZE PROPERLY RATED CABLE FOR OUTDOOR DEVICES.				
SW01	18 AWG 4 CONDUCTOR RSSR	VERIFY	WINDY CITY WIRE	727300
SW02	22 AWG 4 CONDUCTOR RSSR	VERIFY	WINDY CITY WIRE	42510
SW03	22 AWG 3 PWR SHIELDED RSSR	VERIFY	WINDY CITY WIRE	449300
SW04	22 AWG 2 PWR SHIELDED RSSR OOSP	VERIFY	WINDY CITY WIRE	41510-OOSP
SW05	COMPOSITE CABLE OOSP	VERIFY	WINDY CITY WIRE	446100-OOSP

CAMERA MATRIX - HANWHA

TYPE	DESCRIPTION	MANUFACTURER	MODEL	IMAGE SENSOR(S)	LENS	NOTES
1	INTERIOR FIXED CAMERA	HANWHA	XND-6083SR	2MP	VF 2.8-12	POE
2	INTERIOR 180 CAMERA	HANWHA	PNM-9085RQ21	8MP	VF 3.2-10	HPOE
3	INTERIOR 270 CAMERA	HANWHA	PNM-9085RQ21	8MP	VF 3.2-10	HPOE
4	INTERIOR 360 CAMERA	HANWHA	PNM-9085RQ21	8MP	VF 3.2-10	HPOE
5	EXTERIOR FIXED CAMERA (4K)	HANWHA	PNV-40081R	4K	VF 4.50-10	POE+
6	EXTERIOR FIXED CAMERA	HANWHA	XND-6081RV	5MP	VF 3.9-9.4	POE
7	EXTERIOR 180 CAMERA	HANWHA	PNM-9085RQ21	20MP	VF 3.2-10	HPOE
8	EXTERIOR 270 CAMERA	HANWHA	PNM-9085RQ21	20MP	VF 3.2-10	HPOE
9	EXTERIOR 360 CAMERA	HANWHA	PNM-9085RQ21	20MP	VF 3.2-10	HPOE
10	INTERIOR DUAL IMAGE CAMERA	HANWHA	PNM-7062RVD	(2) 2MP	VF 3-8	POE
11	INTERIOR THERMAL + 4K	HANWHA	TMA-C460D7	VOA THERMAL + 4K VISIBLE	13.5MM THERMAL VISIBLE VF 10.9-29	HPOE

CAMERA MATRIX - AXIS

TYPE	DESCRIPTION	MANUFACTURER	MODEL	IMAGE SENSOR(S)	LENS	NOTES
1	INTERIOR FIXED CAMERA	AXIS	P3275-LV	2MP	VF 3.4 - 9.8	POE
2	INTERIOR 180 CAMERA	AXIS	P3735-PL-E	8MP	VF 3.18 - 8.12	Type 2 Class 4
3	INTERIOR 270 CAMERA	AXIS	P3735-PL-E	8MP	VF 3.18 - 8.12	Type 2 Class 4
4	INTERIOR 360 CAMERA	AXIS	P3735-PL-E	8MP	VF 3.18 - 8.12	Type 2 Class 4
5	EXTERIOR FIXED CAMERA (4K)	AXIS	P3288-LVE	4K	VF 4.4 - 14.6	Type 2 Class 3
6	EXTERIOR FIXED CAMERA	AXIS	P3287-LVE	5MP	VF 3.0 - 8.5	Type 1 Class 3
7	EXTERIOR 180 CAMERA	AXIS	P3747-PLVE	20MP	VF 3.18 - 7.42	Type 2 Class 4
8	EXTERIOR 270 CAMERA	AXIS	P3747-PLVE	20MP	VF 3.18 - 7.42	Type 2 Class 4
9	EXTERIOR 360 CAMERA	AXIS	P3747-PLVE	20MP	VF 3.18 - 7.42	Type 2 Class 4
10	INTERIOR DUAL IMAGE CAMERA	AXIS	PA705-PLVE	(2) 2MP	VF 3.28 - 8.12	Type 2 Class 3
11	EXTERIOR THERMAL + 4K	AXIS	G8752-E-MK II 35mm	UNCOOLED MICROBOLOMETER + 2MP VISIBLE	35MM THERMAL VISIBLE VF 4.3 - 137.6	52-50 V DC

SECURITY DEVICE CABLING MATRIX

DEVICE DESCRIPTION	CABLE TYPE(S)
CARD READER	(1) COMPOSITE SECURITY CABLE
BIOMETRIC READER	(1) COMPOSITE SECURITY CABLE & (1) CAT6A CABLE
LOCAL ALARM	(1) COMPOSITE SECURITY CABLE
INTERCOM	(1) COMPOSITE SECURITY CABLE & (1) CAT6A CABLE
INTERCOM - MASTER STATION	(1) COMPOSITE SECURITY CABLE & (1) CAT6A CABLE
DOOR RELEASE	18 AWG 2 CONDUCTOR
DOOR CONTACT	22 AWG 2 CONDUCTOR
OVERHEAD DOOR CONTACT	22 AWG 2 CONDUCTOR
GLASS BREAK SENSOR	22 AWG 4 CONDUCTOR
CAMERAS	(1) CAT6A CABLE

SERVERFARM - SECURITY COMMISSIONING CHECKLIST

ITEM NO	ITEM	CHECKED BY	DATE	COMMENTS
ACCESS CONTROL				
GENERAL				
A001	ACCESS CONTROL CABLING PULLED, TERMINATED, PROPERLY DRESSED AND LABELED AT THE PANEL			
A002	ACCESS CONTROL PANELS INSTALLED AND POWERED ON			
A003	ACCESS CONTROL PANELS LABELED			
A004	ACCESS CONTROL PANEL POWER SUPPLY VOLTAGE IN SPEC			
A006	PROPER ACCESS CONTROL LICENSING PROVIDED			
A008	MANUFACTURER SPECIFIC SOFTWARE TRAINING COMPLETED			
DOORS / GATES				
A007	ACCESS CONTROL CABLING PULLED, TERMINATED, PROPERLY DRESSED AND LABELED AT THE DOOR			
A008	PROPER HARDWARE PROVIDED AND INSTALLED			
A009	HARDWARE TESTED FOR SMOOTH OPERATION AND POSITIVE LATCHING			
A010	LOGS TESTED FOR PROPER FUNCTION			
A011	ACCESS CONTROL DEVICE INSTALLED			
A012	DEVICE LABELED			
A013	VOLTAGE IN SPEC			
A014	STATUS			
A015	FORCED OPEN			
A016	HELD OPEN			
A017	REQUEST TO EXIT			
A018	EMERGENCY REQUEST TO EXIT			
A019	VALID CREDENTIAL READ AND ACCEPT			
A020	INVALID CREDENTIAL READ AND REJECT			
A021	INVALID CREDENTIAL READ AND REJECT			
A022	VALID BIOMETRIC READ AND ACCEPT			
A023	VALID BIOMETRIC READ AND REJECT			
A024	INVALID BIOMETRIC READ AND REJECT			
A025	TESTED FOR FUNCTION ON FIRE ALARM TEST/TROUBLE			
VIDEO SURVEILLANCE				
GENERAL				
V501	SERVER CABLING INSTALLED, PROPERLY DRESSED, AND LABELED			
V502	SERVERS INSTALLED AND POWERED ON			
V503	SERVERS LABELED			
V504	DOCUMENT MAC ADDRESS			
V505	DOCUMENT IP ADDRESS			
V506	VMS SOFTWARE INSTALLED			
V507	CREATE ADMIN PASSWORD FROM DEFAULT			
V508	CREATE REQUIRED USERNAMES AND PASSWORDS			
V509	CONFIGURE STORAGE VOLUMES			
V510	CONFIGURE STORAGE QUOTAS			
V511	CONFIGURE RECORDING SCHEDULE			
V512	PROPER USER LICENSING PROVIDED			
V513	MANUFACTURER SPECIFIC SOFTWARE TRAINING COMPLETED			
CAMERAS				
V514	CONFIRM FINAL CAMERA INSTALL LOCATION AND VIEW ON VIDEO MONITORED AND ALIGNS WITH DESIGN INTENT. CONFIRM WITH OWNER PRIOR TO INSTALL			
V515	CAMERA CABLING INSTALLED, PROPERLY DRESSED, AND LABELED			
V516	CAMERA MEMORY CARD INSTALLED			
V517	CAMERA LABELED			
V518	CAMERA INSTALLED			
V519	CLEAN LENS AND DOME			
V520	AIM AND FOCUS CAMERA			
V521	SAVE DAY/NIGHT SNAPSHOT			
V522	OBTAIEN OWNER APPROVAL OF CAMERA VIEW AND PERFORMANCE			
V523	DOCUMENT MAC ADDRESS			
V524	DOCUMENT IP ADDRESS			
V525	UPDATE FIRMWARE TO LATEST VERSION			
V526	CHANGE ADMIN PASSWORD FROM DEFAULT			
V527	CONFIGURE RESOLUTION AS REQUIRED			
V528	CONFIGURE FRAME RATE AS REQUIRED			
V529	VERIFY RECORDED VIDEO RESOLUTION AND FRAME RATE MEET SPECS			
V530	CONFIGURE COMPRESSION SETTINGS			
V531	CONFIGURE WIDE DYNAMIC RANGE AS REQUIRED			
V532	CONFIGURE IR AS REQUIRED			
V533	DOWNLOAD AND RETAIN A COPY OF CAMERA CONFIGURATION			
WORKSTATIONS				
V534	WORKSTATION CABLING INSTALLED, PROPERLY DRESSED, AND LABELED			
V535	WORKSTATIONS INSTALLED AND POWERED ON			
V536	WORKSTATIONS LABELED			
V537	DOCUMENT MAC ADDRESS			
V538	DOCUMENT IP ADDRESS			
V539	APPLY LATEST OS UPDATES			
V540	CREATE USERNAMES AND PASSWORDS AS REQUIRED			
V541	INSTALL VMS CLIENT AND UPDATE TO LATEST VERSION			
V542	CONFIGURE CAMERA VIEWS AS REQUIRED			
V543	CONFIGURE MAP VIEWS AS REQUIRED			
V544	CONFIGURE EVENT/ALARM LISTS AS REQUIRED			
VIDEO INTERCOM				
V601	DEVICE CABLING INSTALLED, PROPERLY DRESSED, AND LABELED			
V602	INTERCOM DEVICES INSTALLED			
V603	MASTER UNIT POWERED ON AND FUNCTIONAL			
V604	REMOTE UNITS POWERED ON AND FUNCTIONAL			
V605	AUDIBLE TONE GENERATED AT THE MASTER STATION			
V606	AUDIBLE TONE GENERATED AT THE REMOTE STATION(S)			
V607	CLEAR AND INTELLIGIBLE AUDIO AT EACH UNIT			
V608	CLEAR VIDEO IDENTIFICATION OF INDIVIDUAL AT REMOTE STATION(S)			
V609	MOBILE APP DOWNLOADED ON UP TO (5) DEVICES			
V610	MOBILE APP FUNCTIONALITY AT MASTER UNIT CONFIRMED			
V611	PROPER VIDEO INTERCOM LICENSING PROVIDED			
VISITOR MANAGEMENT SYSTEM				
VM01	DEVICE CABLING INSTALLED, PROPERLY DRESSED, AND LABELED			
VM02	BIOMETRIC DEVICE INSTALLED AND POWERED ON			
VM03	PAD AND STAND INSTALLED AND POWERED ON			
VM04	VIDEO CAMERA INSTALLED AND POWERED ON			
VM05	VISITOR MANAGEMENT SYSTEM FUNCTIONALITY TESTED			
VM06	PROPER LICENSING PROVIDED			
NOTE: SC IS REQUIRED TO FILL OUT SECURITY COMMISSIONING CHECKLIST AND SUBMIT TO ENGINEER/OWNER FOR REVIEW AND APPROVAL PRIOR TO PROJECT ACCEPTANCE.				

SECURITY SCOPE REQUIREMENTS

- ACCESS CONTROL**
 - SYSTEM BY SERVERFARM
 - SERVERS BY SERVERFARM
 - CARDS/FUNDS BY SERVERFARM
 - CARD TYPE: HD CORPORATE 1000
 - NUMBER OF CARDS: CAMERA AND PRINTER BY SC
 - BADGINGS: CAMERA AND PRINTER BY SC
 - PROGRAMMING: SC BY ARCHITECT
 - THE SC SHALL MEET WITH OWNER TO DISCUSS HOW THE ACCESS CONTROL AND ALL INCLUDED MODULES ARE TO BE INTEGRATED. THE SC SHALL PROGRAM THE SYSTEM TO MEET THESE CONDITIONS.
 - THE SC SHALL PROVIDE AND INSTALL SOFTWARE MODULES REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. THESE MODULES CONSIST OF BUT ARE NOT LIMITED TO:
 - GENETEC FEDERATION
 - GENETEC GLOBAL CARD HOLDER MANAGER
 - CLIENT WORKSTATIONS
 - BIOMETRIC
 - BIOMETRIC READER INTERFACE
 - VIDEO MANAGEMENT
 - VIDEO INTERCOM INTEGRATION
 - VIDEO SURVEILLANCE SYSTEM INTEGRATION
 - SET UP OF RECORDING SYSTEM BACKUPS AS REQUESTED BY THE OWNER
 - PROGRAM ALL DOOR AND HARDWARE INTO THE SYSTEM WITH ANY CUSTOM NAMING REQUIREMENTS
 - SET UP DOOR GROUPS AS REQUIRED BY OWNER. PROGRAMMING A SINGLE DOOR GROUP IS NOT ACCEPTABLE.
 - SET UP FLOOR GROUPS FOR ELEVATOR CONTROL AS REQUIRED BY OWNER. PROGRAMMING A SINGLE FLOOR GROUP IS NOT ACCEPTABLE.
 - THE SC SHALL COORDINATE WITH THE ELEVATOR CONTRACTOR FOR REQUIREMENTS AND INSTALLATION OF ALL NECESSARY CABLE FOR A COMPLETE OPERATIONAL SYSTEM. THE SC SHALL ALSO COORDINATE ALL FINAL CONNECTIONS BETWEEN THE ACCESS CONTROL SYSTEM AND THE ELEVATOR SYSTEM FOR A COMPLETE OPERATIONAL SYSTEM.
 - SET UP STANDARD ACCESS LEVELS BASED UPON CUSTOM EMPLOYEE TYPES AS REQUIRED BY OWNER. PROGRAMMING A SINGLE ACCESS LEVEL IS NOT ACCEPTABLE.
 - SET UP EMAIL ALERTS WITHIN THE SYSTEM AND VERIFY MESSAGE TRANSMISSION FROM THE ACCESS CONTROL SYSTEM TO THE EMAIL SERVER.
 - PROGRAM ALL ALARM INPUT POINTS INTO THE SYSTEM WITH PRIORITY AS DESIGNATED BY THE OWNER. VERIFY THE FUNCTION AND RESPONSE OF ALL ALARM POINTS PRIOR