











PURCHASER TO PROVIDE THE FOLLOWING IN ACCORDANCE WITH CODE REQUIREMENTS: NOTE: ALL SITE PREPARATION THAT IS REQUIRED TO BE IN PLACE PRIOR TO KONE'S START MUST BE READY TWO (2) WEEKS PRIOR TO THE 27. PROVIDE ELEVATOR LANDINGS SUITABLY PREPARED TO ACCEPT ENTRANCE SILL INSTALLATION PER KONE FINAL LAYOUT DRAWINGS. Grouting to be done by purchaser after sills are installed. Note: traditional angle or concrete sill support is not required. 28. PROVIDE FINISHED-FLOOR HEIGHT MARKS VISIBLE FROM HOISTWAY OPENINGS AT ALL LANDINGS MINIMUM ONE WEEK PRIOR TO BEGINNING 1. PROVIDE SUFFICIENT ON-SITE REFUSE CONTAINERS FOR THE DISPOSAL OF THE ELEVATOR PACKING MATERIAL. SHOULD SUFFICIENT ENTRANCE INSTALLATION. PLACING FLOOR HEIGHT MARK ON HOISTWAY WALL IS DESIRABLE. COMPLETE "CONTRACTOR VERIFICATION FORM CONTAINERS NOT BE PROVIDED, THE REMOVAL OF THE ELEVATOR PACKING MATERIAL SHALL BECOME THE RESPONSIBILITY OF OTHERS. OF SILL TO SILL HEIGHTS AND REMOTE MACHINE PIPING," CONSTR-07-0675. 29. FIRE SERVICE ACCESS ELEVATORS PER CODE REQUIREMENT (IBC 406.3.1) SHALL BE PROVIDED WITH HOISTWAY LIGHTING PER CODE PROVIDE FORKLIFT FOR KONE'S EXCLUSIVE USE DURING THE UNLOADING OF THE ELEVATOR AT TIME OF DELIVERY. 3. PROVIDE ANY CUTOUTS TO ACCOMMODATE THE ELEVATOR EQUIPMENT (SEE NOTES BELOW). REQUIREMENT (IBC 3007.6.2). THE HOISTWAY LIGHTING SHALL ILLUMINATE THE ENTIRE HEIGHT OF THE HOISTWAY AND SHALL BE 4. PROVIDE AND INSTALL FINISHED ELEVATOR CAB FLOORING PRIOR TO BALANCING CABS (COORDINATE WITH KONE). CAB FLOORING/WEIGHT LOCATED SUCH THAT IT DOES NOT INTERFERE WITH THE OPERATION OF THE ELEVATOR OR REDUCE ANY CLEARANCES BELOW APPLICABLE ALLOWANCE SHALL BE IN ACCORDANCE WITH KONE'S APPROVED LAYOUTS. OWNER MUST PROVIDE CERTIFICATION (TO THE ELEVATOR CODE REQUIREMENTS. (APPLICABLE ONLY IN JURISDICTIONS ENFORCING THE IBC BUILDING CODE) INSPECTOR AT TIME OF INSPECTION) THAT FLOORING MEETS FLAME SPREAD AND SMOKE DENSITY REQUIREMENTS. (ASME A17.1/CSA B44 30. FOR ELEVATORS INSTALLED IN JURISDICTIONS ENFORCING IBC 2012 AND LATER EDITIONS: FIRE SERVICE ACCESS ELEVATORS REQUIRE SEC 2.14.2.1) BOTH A NORMAL POWER SOURCE AND A TYPE 60/CLASS 2/LEVEL 1 STANDBY POWER SOURCE FOR THE FOLLOWING: ELEVATOR EQUIPMENT, 5. PROVIDE PERMANENT ELEVATOR LOBBY LIGHTING, CEILING AND FLOORING PRIOR TO INSPECTION DATE. ELEVATOR HOISTWAY LIGHTING, ELEVATOR MACHINE ROOM HVAC EQUIPMENT AND ELEVATOR CONTROLLER COOLING EQUIPMENT (PER IBC 6. OWNER MUST PROVIDE CERTIFICATION (TO THE ELEVATOR INSPECTOR AT TIME OF INSPECTION) THAT OWNER-SUPPLIED ELEVATOR INTERIOR FINISHES MEET FLAME SPREAD AND SMOKE DENSITY REQUIREMENTS. (ASME A17.1/CSA B44 SEC 2.14.2.1, ASME A17.1/CSA 31. PROVIDE SUITABLE LIGHTING FOR MACHINE SPACE WITH LIGHT SWITCH LOCATED IN THE HOISTWAY ON THE STRIKE JAMB SIDE OF TOP B44 SEC 2.14.1.8, ASME Z97.1/ CGSB 12.1 IN CANADA) LANDING DOOR WHERE PRACTICAL. ILLUMINATION TO BE EQUIVALENT TO 19 FOOT-CANDLES (200LX) AT MACHINE (ASME A17.1/CSA B44 7. PROVIDE CUTTING/ CORING OF ALL OPENINGS AND PENETRATIONS REQUIRED TO INSTALL HALL PUSH BUTTONS, SIGNAL FIXTURES, WIRING DUCT AND PIPING, AND SLEEVES. SLEEVES WILL BE REQUIRED IN THE HOISTWAY WALL FOR EACH ELEVATOR. 32. IF THE CONTROL SPACE IS LOCATED REMOTE FROM THE ELEVATOR HOISTWAY TOP LANDING THE FOLLOWING MAY APPLY: 8. PROVIDE ANY REPAIRS SUCH AS GROUTING, PATCHING AND PAINTING MADE NECESSARY BY SUCH CUTTING/ CORING. PROVIDE FIRE A. IF APPLICABLE, PROVIDE MACHINE SPACE ACCESS DOOR OF THE SIZE AND IN THE LOCATION SHOWN ON THE KONE FINAL LAYOUT CAULKING AROUND ALL FIXTURES AND AS NEEDED TO SATISFY NFPA 70 ARTICLE 300.21, OR ANY APPLICABLE LOCAL CODE. DRAWINGS. THE ACCESS DOOR SHALL BE SECURED AGAINST UNAUTHORIZED ACCESS. IT SHALL BE SELF-CLOSING, SELF-LOCKING AND 9. PLEASE NOTE THAT NONE OF THE ELEVATOR COMPONENTS ARE WEATHER-PROOF AND THAT THE ELEVATOR ENTRANCES DO NOT SEAL THE OPERABLE FROM THE INSIDE WITHOUT A KEY. B. PROVIDE SUITABLE LIGHTING IN OR ABOVE THE MACHINE SPACE ACCESS WITH LIGHT SWITCH LOCATED WITHIN 18" [457 MM] OF STRIKE HOISTWAY FROM INCLEMENT WEATHER. THE ENTIRE ELEVATOR, HOISTWAY, AND CONTROLS MUST REMAIN PROTECTED FROM INCLEMENT WEATHER PRIOR TO AND THROUGHOUT THE INSTALLATION. JAMB SIDE OF ACCESS SPACE DOOR WHERE PRACTICAL. WHEN PERMITTED BY STATE AND LOCAL CODE THE LIGHT SWITCH SHOULD ALSO CONTROL THE MACHINE SPACE LIGHTING. C. CONDUCTORS AND CABLES LOCATED OUTSIDE OF THE ELEVATOR HOISTWAY, MACHINE SPACE AND CONTROL SPACE, THAT PROVIDE NORMAL 10. PROVIDE ADEQUATE, ROLL-ABLE ACCESS (CLEAR PATH WITHOUT OBSTRUCTIONS, WALLS, ETC.) INTO THE BUILDING FOR DELIVERY OF OR STANDBY POWER, CAR LIGHTING POWER, CAR VENTILATION POWER, CAR HEATING POWER, CAR AIR CONDITIONING POWER, CONTROL THE ELEVATOR MATERIAL. CLEAN, SAFE, SECURE AND DRY STORAGE IS REQUIRED ADJACENT TO THE HOISTWAY AT GRADE LEVEL WITH SIGNALS, COMMUNICATION WITH THE CAR AND FIRE/HEAT-DETECTING SYSTEMS CONTROL SIGNALS TO FIRE SERVICE ACCESS ELEVATORS, MINIMUM SPACE OF 20'X 20' [6M X 6M] PER ELEVATOR. SHALL BE PROTECTED BY CONSTRUCTION HAVING A FIRE-RESISTANCE RATING OF NOT LESS THAN 2 HOURS. (APPLICABLE ONLY IN 11. PROVIDE FREE-STANDING, REMOVABLE, OSHA-COMPLIANT BARRICADES CAPABLE OF WITHSTANDING 200LB (890N) OF FORCE IN ALL JURISDICTIONS ENFORCING THE IBC BUILDING CODE OR ANY APPLICABLE LOCAL CODES.) DIRECTIONS AROUND ALL HOISTWAY OPENINGS PER OSHA 29 CFR 1926.502, AND/OR ANY APPLICABLE LOCAL CODE. D. IN CASES WHERE A BATTERY LOWERING DEVICE IS PROVIDED, CONTROL CLOSET MAY NOT BE ADEQUATE. PLEASE CONSULT KONE 12. PROVIDE AND INSTALL FULL-COVERING ENTRY PROTECTION AS PER LOCAL REQUIREMENTS AND MANUFACTURER'S REQUIREMENTS. 33. PROVIDE AND INSTALL GFCI-TYPE RECEPTACLE LOCATED AT MACHINE IN THE TOP OF THE HOISTWAY OR IN MACHINE ROOM AS PROTECTION TO BE MADE OF NYLON MESH OR REINFORCED PLASTIC. AT ALL HOISTWAY OPENINGS TO PREVENT MATERIALS OR TOOLING FROM FALLING INTO THE ELEVATOR SHAFT DURING INSTALLATION PER FEDERAL OSHA REQUIREMENTS LISTED IN 29 CFR 1926.502(J). APPLICABLE (NFPA 70 ARTICLE 620.85 OR CEC ARTICLE 38.85 WHICHEVER IS APPLICABLE). 34. PROVIDE AND INSTALL LIGHT SWITCH LOCATED AT MANUAL BRAKE RELEASE LOCATION: MAY ALSO BE REQUIRED IN CONTROL SPACE PER IN CANADA, WHERE REQUIRED BY PROVINCIAL REGULATION, ENCLOSE THE FRONT OF THE HOISTWAY WITH REMOVABLE HOARDING OR SCREENING TO PREVENT MATERIAL FROM ENTERING THE HOISTWAY. DESIGN AND INSTALL ENTRANCE PROTECTION IN SUCH A WAY AS TO LOCAL JURISDICTION ALLOW QUICK ACCESSIBILITY IN AND OUT OF THE HOISTWAY. 35. WHERE A SINGLE ELEVATOR IS INSTALLED IN A HOISTWAY AND A PORTION OF THE TRAVEL EXTENDS HIGHER THAT 11M (36 FT.) 13. PROVIDE TWO (2) LIFELINE ATTACHMENTS AT THE TOP, FRONT OF THE HOISTWAY. EACH MUST BE CAPABLE OF WITHSTANDING A 5000 LB BETWEEN ENTRANCES (SINGLE BLIND HOISTWAY), EMERGENCY DOOR(S) MUST BE PROVIDED. EMERGENCY DOORS AND THEIR ELECTRICAL [2250 KG] LOAD PER OSHA 29 CFR 1926.502, OR ANY APPLICABLE LOCAL CODE. FOR MACHINE-ROOM-LESS APPLICATIONS, PROVIDE ATTACHMENTS AS DESCRIBED ABOVE, OR INSTALL KONE-PROVIDED 5" X 5" X 1/4" (127MM X 127MM X 6,35MM) TUBE STEEL LIFELINE CONTACTS SHALL COMPLY WITH THE CURRENT ASME A17.1/CSA-B44 CODE EDITION IN EFFECT AT THE TIME OF INSTALLATION AND/OR ANY APPLICABLE LOCAL CODE. ASME A17.1/CSA-B44 SECTION 2.11.1.2 COVERS "EMERGENCY DOORS IN BLIND HOISTWAYS" AND SECTION 2.26.2 COVERS "ELECTRICAL PROTECTIVE DEVICES". EACH EMERGENCY DOOR MUST BE PROVIDED WITH AN ELECTRICAL CONTACT WITH BEAM IN THE ELEVATOR HOISTWAY OVERHEAD 10 INCHES (254 MM) FROM FRONT OF HOISTWAY TO CENTER LINE, WITH BOTTOM OF LIFELINE BEAM AT SAME ELEVATION AS BOTTOM OF HOISTING I-BEAM. LIFELINE TUBE STEEL SUPPLIED BY KONE BY REQUEST AT NO MINIMUM UL/CSA NEMA A300 RATING SUITABLE FOR USE IN A 230VAC @ 3 AMP CIRCUIT. CONSULT KONE REPRESENTATIVE IF THERE ARE ADDITIONAL COST. ENGINEERING DETAILS, ATTACHMENT DETAILS AND/OR MODIFICATIONS, OR ANY BEAM(S) ALTERATIONS IN THE FIELD ANY QUESTIONS CONCERNING THE CODE REQUIREMENTS. FOR INSTALLATION IS BY OTHERS. 14. PROVIDE PROPER LIGHTING IN ALL WORK AREAS AND STAIRWAYS, INCLUDING ACCESS TO ALL FLOORS AND MACHINE ROOMS PER OSHA APPROVED BY 29.CFR1926.1052 OR ANY APPLICABLE LOCAL CODE. 36. PROVIDE A LEGAL, DRY AND CLEAN PIT WITH LEVEL PIT FLOOR, BUILT PER KONE FINAL LAYOUT DRAWINGS. PIT SHALL BE REINFORCED 15. PROVIDE AND MAINTAIN 6-FOOT (1800 MM) CLEAR WORK AREA IN FRONT OF ALL ENTRANCE OPENINGS PER OSHA 29.CFR1926.502 OR ANY TO SUSTAIN VERTICAL FORCES DETAILED ON KONE FINAL LAYOUT DRAWINGS (VERTICAL FORCES DETAILED ARE TWO TIMES THE STATIC APPLICABLE LOCAL CODE. 37. SUMPS AND/OR SUMP PUMPS (WHERE PERMITTED) LOCATED WITHIN THE PIT MAY NOT INTERFERE WITH THE ELEVATOR EQUIPMENT. SUMPS TO BE COVERED WITH FLUSH MOUNTED, NON-COMBUSTIBLE COVER CAPABLE OF WITHSTANDING 150 LBS PER SQUARE FOOT (7 KPA). THE 16. PROVIDE A CLEAR AND PLUMB HOISTWAY OF SIZE SHOWN ON APPROVED KONE FINAL LAYOUT DRAWINGS. ANY VARIATIONS FROM THE SUMP PUMP/DRAIN MUST. AT MINIMUM, REMOVE 3,000 GAL/H (11.4 M3/H) PER ELEVATOR. APPROVAL SPACE 38. PROVIDE A PIT LIGHT FIXTURE WITH SWITCH AND GUARDS WITH AN ILLUMINATION LEVEL EQUAL TO OR GREATER THAN THAT REQUIRED DETAILED DIMENSIONS MAY NOT EXCEED 2" [50 MM] GREATER AND MAY NOT BE LESS THAN THE CLEAR DIMENSIONS DETAILED. (TOLERANCE: -0" + 2" [-0 MM +50 MM]). BY ASME A17.1/CSA B44 2000, OR APPLICABLE VERSION, RECOMMENDED TO PROVIDE MINIMUM 4-FOOT DOUBLE TUBE FLUORESCENT PROJECT: 17. PROVIDE HOISTWAY VENTILATION PER CODE REQUIREMENTS (EG., IBC SEC 3004.1). FOR PROPER EQUIPMENT OPERATION, THE MACHINE FIXTURE, WITH SUITABLE GUARD AND MOUNTED TO REAR WALL OF PIT PER KONE INSTALLATION REPRESENTATIVE'S DIRECTION. CANNERY TRAILS SPACE IN MACHINE ROOM OR AT THE TOP OF HOISTWAY MUST MAINTAIN A TEMPÉRATURE BETWEEN 41 F [5 C] AND 104 F [40 C]. 39. PROVIDE A DEDICATED PIT CIRCUIT WITH GECI-PROTECTED 15 OR 20-AMP 120V AC DUPLEX OUTLET. LOCATION TO BE COORDINATED MAXIMUM ALLOWED HUMIDITY IS 95% NON-CONDENSING. WITH THE KONE PROJECT TEAM USING THE KONE FINAL APPROVE LAYOUT DRAWINGS (NFPA 70 ARTICLE 620.850R; CEC ARTICLE 38.85 LOCATION 18. PROVIDE ANY PARTITIONS BETWEEN COMMON HOISTWAYS IF APPLICABLE. WHICHEVER IS APPLICABLE). ECOSPACE 18.1-1 19. IN CASES WHERE MULTIPLE ELEVATORS ARE IN A COMMON HOISTWAY, AND THE COUNTERWEIGHTS ARE LOCATED BETWEEN ELEVATORS, THE 40. PROVIDE NON-GFCI-PROTECTED SINGLE RECEPTACLE FOR SUMP PUMPS (NFPA 70 ARTICLE 620.85, NFPA 70 ARTICLE 620.85 OR CEC ENG/ARCH: ENTIRE LENGTH OF COUNTERWEIGHT RUNWAY MUST BE CUARDED. THE GUARD SHALL EXTEND AT LEAST 6 INCHES (150MM) HORIZONTALLY ARTICLE 38.85 WHICHEVER IS APPLICABLE). BEYOND EACH COUNTERWEIGHT RAIL. THE GUARD SHALL BE MADE FROM WIRE-MESH MATERIAL EQUAL TO OR STRONGER THAN .048-INCH 41. PIT LADDER TO BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL EXTENDING FROM PIT FLOOR TO 48" [1200 MM] ABOVE THE SILL OF DIAMETER WIRE WITH OPENINGS NOT EXCEEDING 1/2 INCH (13 MM), SECURELY FASTENED TO KEEP THE GUARD TAUT AND PLUMB. (ASME THE ACCESS LANDING. PIT LADDER IS SUPPLIED BY KONE WITH ECOSPACE UNITS: PROVIDED BY PURCHASER ON OTHER KONE PRODUCTS CONTRACTOR: A17.1/CSA R44: \$3141.7. GENERAL REQUIREMENTS.) UNLESS OTHERWISE NOTED ON THE LAYOUT DRAWING. LOCATE PER KONE FINAL LAYOUT DRAWINGS. COORDINATE LADDER SIZING AND ROYAL CONSTRUCTION INC 20. ON APPLICATIONS WHERE WORKING PLATFORMS ARE REQUIRED, WORKING PLATFORMS PROVIDED SHALL COMPLY WITH THE REQUIREMENTS OF LOCATION WITH KONE REPRESENTATIVE TO ASSURE PROPER FIT IN HOISTWAY. THE CURRENT ASME A17.1 / CSA-B44 CODE EDITION IN EFFECT AT THE TIME OF INSTALLATION AND /OR ANY APPLICABLE LOCAL CODE. 21. PROVIDE ADEQUATE SUPPORT FOR GUIDE RAIL BRACKETS FROM PIT FLOOR TO THE TOP OF THE HOISTWAY, LOCATE RAIL BACKING PER KONE FINAL APPROVED LAYOUT DRAWINGS. WHEN MAXIMUM BRACKET SPAN IS EXCEEDED. ADDITIONAL SUPPORT SHALL BE PROVIDED AT PURCHASER'S EXPENSE, ANY BRACKET MOUNTING SURFACE THAT IS NOT IN LINE WITH THE CLEAR HOISTWAY DIMENSION DETAILED ON THE APPROVED KONE FINAL LAYOUT DRAWINGS MAY NEED TO BE CORRECTED TO MEET THE PROPER DIMENSION AT PURCHASER'S EXPENSE. 22. IF GUIDE RAIL BRACKETS ARE TO ATTACH TO STEEL, ENSURE ALL BRACKETS ARE INSTALLED PRIOR TO APPLYING FIREPROOFING TO THE STEEL. OTHERWISE, REMOVAL AND REAPPLICATION OF FIREPROOFING WILL BE AT PURCHASER'S EXPENSE. 23. ALL OFFSETS, LEDGES OR PROJECTIONS WITHIN THE HOISTWAY SHALL BE ADDRESSED IN ACCORDANCE WITH APPLICABLE LOCAL CODE. ALL OFFSETS. LEDGES OR PROJECTIONS WITHIN THE HOISTWAY GREATER THAN 4 INCHES (100MM) MUST BE TAPERED TO NOT LESS THAN 75 DEGREES (ASME A17.1/CSA B44 SEC 2.1.6.2). MAXIMUM LEDGE OR PROJECTION IS 2 INCHES (50MM) IN CALIFORNIA AND DISTRICT ITEM NO. NETWORK NO. EQUIPMENT NO. OF COLUMBIA 24. IF CONCRETE BLOCK WALL CONSTRUCTION, REFER TO THE APPROVED KONE FINAL APPROVED LAYOUT DRAWINGS FOR PROPER INSTALLATION OF RAIL BRACKET ATTACHMENTS. INSERTS PROVIDED BY KONE UNLESS OTHERWISE NOTED ON THE APPROVED KONE FINAL APPROVED LAYOUT DRAWINGS, INSERT TYPE MUST BE APPROVED BY KONE, CONCRETE MASONRY UNITS, MORTAR AND GROUT, SHALL CONFORM TO IBC 2000 OR ANY APPLICABLE LOCAL CODE. CONCRETE MASONRY UNITS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI (10.5 MPA). 2019-10-02 - KAR MORTAR AND GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI (13.8 MPA). PRELIMINARY 25. KONE ENTRANCE JAMBS ARE NON-FERROUS AND MATERIAL MAY NOT BE ATTACHED TO THEM (I.E. FIRE DOORS/CURTAINS). DATE NO BY CK DESCRIPTION 26. ARRANGE FOR ENTRANCE WALLS TO BE CONSTRUCTED AT THE TIME DOORFRAMES AND SILLS ARE INSTALLED TO FACILITATE TIMELY This information is confidential and remains the property of kone inc. Its use, reproduction or dissemination without the express permission of kone inc. Is strictly prohibited. INSTALLATION OF HALL FIXTURE FACEPLATES. ENTIRE FRONT WALL MUST BE LEFT OPEN AT TOP AND BOTTOM LANDINGS UNTIL FLEVATOR FOLIPMENT IS INSTALLED. INTERMEDIATE LANDINGS MUST HAVE ROUGH OPENINGS OF THE SIZE AND LOCATION SHOWN ON KONE FINAL APPROVED LAYOUT DRAWINGS TO ALLOW INSTALLATION OF ENTRANCES, ALL ENTRANCE OPENINGS MUST BE ALIGNED VERTICALLY, ADEQUATE SUPPORT FOR ENTRANCE ATTACHMENT POINTS SHALL BE PROVIDED AT ALL LANDINGS. ANY MARBLE, STONE OR SIMILAR WALL MATERIAL MUST BE PREPARED AFTER THE ENTRANCE FRAMES ARE INSTALLED. PROVIDE CORRIDOR LINES FOR ANY MARBLE OR "SPECIAL FINISH" GENERATED ON: 10/02/19 BY: KSW REV NOTE: IF CONCRETE BLOCK WALL CONSTRUCTION- TO PREVENT OVERLOADING ENTRANCE FRAMES, TOP OF ENTRANCES SHOULD NOT RECEIVE UNITS: IMPERIAL 1-18.1 MORE THAN ONE ROW OF BLOCK. A LINTEL MUST BE INSTALLED TO SUPPORT ADDITIONAL ROWS OF BLOCK. DRAWING DESCRIPTION SHEET 7 of 16 M-3129912-10010 CONTRACT

PURCHASER TO PROVIDE THE FOLLOWING IN ACCORDANCE WITH CODE REQUIREMENTS: NOTE: ALL SITE PREPARATION THAT IS REQUIRED TO BE IN PLACE PRIOR TO KONE'S START MUST BE READY TWO (2) WEEKS PRIOR TO THE INTEGRATED CONTROL SOLUTION (ICS) 70. PROVIDE A COMPLETELY OPEN FRONT WALL AT TOP LANDING WITH ACCESS AS INDICATED ON THE KONE FINAL LAYOUT DRAWINGS. MUST HAVE ADEQUATE TEMPORARY OR PERMANENT LIGHTING FOR INSTALLATION PURPOSES. NOTE: THE LOBBY SIDE OF THE ICS CONTROL 42. US APPLICATIONS - PURCHASER PROVIDES IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, NFPA 70 (NEC) ARTICLE 620 OR ANY CABINET MUST BE FACED WITH 2 LAYERS OF DRY WALL TO COMPLY WITH UL CERTIFICATION, REGARDLESS OF FRONT TOP FALD FOR APPLICABLE LOCAL CODE. DETAILS AND WALL TYPE AND MINIMUM DIMENSIONS. 43. CANADIAN APPLICATIONS - PURCHASER PROVIDES IN ACCORDANCE WITH CANADIAN ELECTRICAL CODE, C22.1 SECTION 38 OR ANY 71. PROVIDE ENVIRONMENT FOR PROPER EQUIPMENT OPERATION DURING INSTALLATION AND AFTER ACCEPTANCE, THE TEMPERATURE AT THE TOP FLOOR ELEVATOR LOBBY MUST MAINTAIN BETWEEN 41' F [5' C] AND 104' F [40' C]. MAXIMUM ALLOWED HUMIDITY IS 95% APPLICABLE LOCAL CODE. 44. PROVIDE FOR ALL ELECTRICAL BRANCH CIRCUITS/DISCONNECTS TO BE LABELED (NFPA 70 ARTICLE 620.54 / 620.53 / 620.51D , CEC ARTICLES 38.54/ 38.53/ 36.51D) 72. PROVIDE SAFE AND CONVENIENT ROLLABLE ACCESS TO TOP FLOOR ELEVATOR LOBBY AREA. (ASME A17.1/CSA B44 SEC 2.8.1, ASME 45. PROVIDE 480/208 VAC (USA) OR 575/208 VAC (CANADA) THREE-PHASE PERMANENT POWER, INCLUDING PIPING, WIRING AND FUSED A17.1/CSA B44 SEC 2.7.3) DISCONNECT, TO CONTROLLER LOCATION TO FACILITATE ELEVATOR INSTALLATION PRIOR TO START OF PROJECT. 73. PROVIDE ALL APPLICABLE SLEEVES, OR PENETRATIONS, LOCATED PER ICS PANEL PLAN VIEW ON THE KONE FINAL APPROVED LAYOUT 46. PROVIDE 220 VAC SINGLE-PHASE TEMP. POWER AND 115 VAC SINGLE-PHASE TEMP. POWER, OF PERMANENT CHARACTERISTICS AT EACH ELEVATOR LANDING FOR LIGHTING AND INSTALLATION METHOD TOOLS. LOCATE CONNECTION POINTS AT ELEVATOR HOISTWAY. CONSULT 74. PROVIDE A CLEAN AND DRY ELEVATOR LOBBY AT TOP LANDING. YOUR KONE REPRESENTATIVE FOR CONFIRMATION OF LOCATION AND TYPE OF TEMPORARY POWER. 75. IF APPLICABLE, PROVIDE AN ACCESS DOOR OF SIZE AND LOCATION SHOWN ON THE KONE FINAL LAYOUT DRAWINGS. THE ACCESS DOOR 47. WHEN GENERATOR IS USED TO PROVIDE 3-PHASE 480/ 208 VAC (USA) OR 575/208 VAC (CANADA) POWER FOR INSTALLATION, PURCHASER SHALL BE SECURED AGAINST UNAUTHORIZED ACCESS. IT SHALL BE SELF-CLOSING, SELF-LOCKING AND OPERABLE FROM THE INSIDE TO ACCEPT CHANGE NOTICE FOR ADDITIONAL COSTS, ESTIMATED LOCALLY BY INSTALLING OFFICE, TO COVER INEFFICIENCIES AND ANY WITHOUT A KEY (IF SEISMIC CONDITIONS EXIST) DAMAGES RESULTING FROM INSTALLING WITHOUT PERMANENT POWER PRESENT. 76. PROVIDE SUITABLE LIGHTING FOR ICS PANEL ÁREA WITH LIGHT SWITCH LOCATED WITHIN 18" [457 MM] OF ELEVATOR ENTRANCE DOOR WHERE PRACTICAL. WHEN PERMITTED BY STATE AND LOCAL CODE THE LIGHT SWITCH SHOULD ALSO CONTROL THE MACHINE SPACE LIGHTING. NOTE: OUR ELEVATOR CONTROLLERS REQUIRE WYE CONFIGURATION TRANSFORMERS. IT IS ALSO THE RESPONSIBILITY OF THE PURCHASER TO PROVIDE CONSISTENT THREE-PHASE VOLTAGES BALANCED WITHIN +/-10% WHEN MEASURED PHASE-TO-PHASE AND +/-10% WHEN MEASURED 77. PROVIDE DEDICATED GFCI-PROTECTED 120VAC 20-AMP DUPLEX (15 AMP IN CANADA) OUTLET NEXT TO EACH ICS PANEL CONTROL CABINET PHASE-TO-GROUND 48. PROVIDE A DEDICATED 115VAC, 20 AMP CIRCUIT IN THE FIRE COMMAND ROOM PIPED AND WIRED TO THE LOBBY PANEL WHERE 78. PROVIDE 480/208 VAC (USA) OR 575/208 VAC (CANADA) THREE-PHASE PERMANENT POWER, INCLUDING PIPING, WIRING AND FUSED DISCONNECT, TO NON-FUSED DISCONNECT LOCATED IN HOISTWAY AT TOP LANDING TO FACILITATE ELEVATOR INSTALLATION PRIOR TO 49. PROVIDE TWO (2) DEDICATED 15 AMP 120V AC FUSED SERVICE WITH GROUND (SUPPLIED THROUGH AUTOMATIC EMERGENCY LIGHTING SUPPLY IF AVAILABLE IN BUILDING) CONNECTED TO EACH ELEVATOR SIGNAL CONTROL CABINET; ONE FOR CAR LIGHTING, AND ONE FOR 79. PROVIDE A SINGLE MEANS OF DISCONNECTING ALL UNGROUNDED MAIN POWER CONDUCTORS FOR EACH ELEVATOR BY AN ENCLOSED, SYSTEM COMMUNICATIONS DEVICE. MUST INCLUDE THE MEANS TO DISCONNECT THIS SERVICE AND LOCK-OFF IN THE "OPEN" POSITION EXTERNALLY OPERABLE, FUSED MOTOR CIRCUIT SWITCH OR CIRCUIT BREAKER. MUST BE LOCKABLE IN THE OPEN POSITION. THIS disconnecting means shall disconnect the normal power service as well as emergency power service, when provided. Note (NFPA 70 ARTICLE 620.22 AND 620.53 OR CEC ARTICLE 38.22 AND 38.53). 50. PROVIDE SEPARATE 115 VAC 15 AMP BRANCH CIRCUIT FOR KGC (KONE GROUP CONTROL), WHEN SPECIFIED, POWERED BY BUILDING 1: IF A CIRCUIT BREAKER IS TO BE PROVIDED IN LIEU OF FUSETRONS, AN ADJUSTABLE TIME-DELAY STYLE IS RECOMMENDED. NOTE 2: IF A BATTERY-POWERED RESCUE DEVICE IS REQUIRED, THE ABOVE-MENTIONED DISCONNECT MUST HAVE AN AUXILIARY CONTACT MONITORED EMERGENCY POWER SYSTEM, WHEN APPLICABLE. 51. PROVIDE SEPARATE 115 VAC 15 AMP BRANCH CIRCUIT FOR POLARIS (DESTINATION CONTROL SYSTEM) SHAFT POWER WHEN SPECIFIED, BY ELEVATOR CONTROLLER THAT IS POSITIVELY OPENED MECHANICALLY AND IS NORMALLY CLOSED (NC) WHEN THE MAIN POWER IS IN THE POWERED BY BUILDING EMERGENCY POWER SYSTEM, WHEN APPLICABLE. ON POSITION, AND IS NORMALLY OPEN (NO) WHEN POWER IS IN THE OFF POSITION. NOTE 3: IF A BATTERY-POWERED RESCUE DEVICE IS REQUIRED AND A SEPARATE SHUNT TRIP BREAKER WHICH IS SUBJECT TO EITHER THE HOISTWAY OR CONTROL SPACE SPRINKLER SYSTEM IS CONTROL SPACE/ MACHINE ROOM provided, the shunt trip breaker must have an auxiliary contact that is positively opened mechanically and is no when 52. PROVIDE A LEGAL CONTROL SPACE/ MACHINE ROOM WITH ACCESS AS INDICATED ON THE KONE FINAL LAYOUT DRAWINGS. TO INCLUDE A THE MAIN POWER IS IN THE ON POSITION. TEMPORARY OR PERMANENT DOOR THAT CAN BE LOCKED FROM OUTSIDE. PERMANENT DOOR MUST BE SELF-CLOSING, SELF-LOCKING, AND 80. PROVIDE A DIRECT-IN-DIAL (DID) ANALOG PHONE LINE, ACTIVATED AT LEAST ONE WEEK PRIOR TO INSPECTION, TERMINATED AT THE REQUIRE A KEY TO OPEN FROM OUTSIDE. MUST HAVE ADEQUATE TEMPORARY OR PERMANENT LIGHTING FOR INSTALLATION PURPOSES. FOR TOP LANDING ICS LOCATION. GC/ OWNER MAY ELECT TO HAVE A SEPARATE ANALOG LINE INSTALLED (ONE PER ELEVATOR), OR GC/ OWNER MAY ELECT TO PROVIDE DID LINES FROM AN ANALOG STATION CARD IN THE BUILDING'S PBX SYSTEM. IF GC/OWNER PROVIDES A DIRECT PROPER EQUIPMENT OPERATION, THE TEMPERATURE IN THE CONTROL SPACE MUST MAINTAIN BETWEEN 41' F [5' C] AND 104' F [40' C]. DIAL ANALOG PHONE LINE OR LINES OFF AN EXISTING PBX PHONE SYSTEM, A BACKUP POWER SOURCE MUST ALSO BE PROVIDED. ALL MAXIMUM ALLOWED HUMIDITY IS 95% NON—CONDENSING 53. PROVIDE SAFE AND CONVENIENT ACCESS TO CONTROL SPACE/MACHINE ROOM INCLUDING PROVISIONS FOR NECESSARY LIGHTING FOR PHONE AND ASSOCIATED EQUIPMENT PROVIDED BY GC/ OWNER SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF ASME A17.1/ CSA ACCESS PATH (ASME A17.1/CSA B44 SEC 2.8.1, ASME A17.1/CSA B44 SEC 2.7.3) B44, LOCAL CODES AND APPLICABLE LAW, AS AMENDED. 54. IF CONTROL SPACE IS ADJÁCENT TO THE HOISTWAY, PROVIDE ALL APPLICABLE SLÉEVES, OR PENETRATIONS, LOCATED PER CONTROL 81. PROVIDE ALL FIRE ALARM INITIATING SIGNALS AS REQUIRED BY ALL NATIONAL, STATE AND LOCAL CODES FOR TERMINATION AT THE SPACE PLAN VIEW ON THE KONE FINAL LAYOUT DRAWINGS. PRIMARY ELEVATOR ICS PANEL IN EACH GROUP. 55. PROVIDE A CLEAN AND DRY ELEVATOR MACHINE ROOM. 82. PROVIDE EMERGENCY POWER TRANSFER SWITCH AND POWER CHANGE PENDING SIGNALS AS REQUIRED- 2 NORMALLY OPEN DRY CONTACTS FROM TRANSFER SWITCH TO PRIMARY ELEVATOR ICS PANEL (2 PAIRS PLUS GROUND WIRE). 1 CONTACT CLOSES TO SIGNAL EMERGENCY 56. IF APPLICABLE, PROVIDE A GOVERNOR ACCESS DOOR OF SIZE AND LOCATION SHOWN ON THE KONE FINAL LAYOUT DRAWINGS. THE ACCESS APPROVED BY DOOR SHALL BE SECURED AGAINST UNAUTHORIZED ACCESS. IT SHALL BE SELF-CLOSING, SELF-LOCKING AND OPERABLE FROM THE INSIDE POWER IS PRESENT, 1 CONTACT CLOSES TO GIVE 30 SECOND PRE-SIGNAL PRIOR TO TRÁNSFER SWITCH CHANGE. 83. FURNISH AND INSTALL SMOKE DETECTORS AND FIRE OPERATION PER ASME A17.1/CSA B44 SEC 2.27.3.2, NFPA 72; ONE FOR LOBBY 57. PROVIDE SUITABLE LIGHTING FOR CONTROL SPACE WITH LIGHT SWITCH LOCATED WITHIN 18" [457 MM] OF STRIKE JAMB SIDE OF CONTROL SPACE DOOR WHERE PRACTICAL. WHEN PERMITTED BY STATE AND LOCAL CODE THE LIGHT SWITCH SHOULD ALSO CONTROL THE DETECTOR, MACHINE ROOM DETECTOR, HOISTWAY DETECTOR, AND ONE FOR ALL GROUPED NON-LOBBY DETECTORS ARE REQUIRED. PROVIDE NORMALLY-CLOSED DRY CONTACTS, WITH WIRING, TO PRIMARY ELEVATOR ICS PANEL FOR EACH GROUP LISTED ABOVE. MACHINE SPACE LIGHTING IF CONTROL SPACE IS ADJACENT TO THE HOISTWAY AT THE TOP LANDING 84. PROVIDE AND INSTALL SMOKE DETECTOR IN HOISTWAY AS REQUIRED PER LOCAL CODES, AND IN ALL ELEVATOR LOBBIES 58. PROVIDE DEDICATED GFCI-PROTECTED 120VAC 20-AMP DUPLEX (15 AMP IN CANADA) OUTLET NEXT TO EACH SIGNAL CONTROL CABINET. 85. PROVIDE HEAT DETECTORS AND "SHUNT-TRIP OPERATION" WHEN SPRINKLERS ARE TO BE PROVIDED IN TOP FLOOR ELEVATOR LOBBY OR 59. KONE KRMS FORM SHALL BE FULLY EXECUTED AND RETURNED TO KONE ONE (1) WEEK PRIOR TO INSPECTION. HOISTWAY, (ASME A17.1 SEC 2.8.2.1.2, NFPA 13 SEC 4-13.5, ASME A17.1 SEC 2.8.2.3.1, ASME A17.1 SEC 2.8.2.3.2, NFPA 72). APPROVAL SPACE 60. PROVIDE A SINGLE MEANS OF DISCONNECTING ALL UNGROUNDED MAIN POWER CONDUCTORS FOR EACH ELEVATOR BY AN ENCLOSED, 86. NON-ELEVATOR RELATED PIPING AND EQUIPMENT IS PROHIBITED IN HOISTWAY (ASME A17.1/CSA B44 SEC 2.8.1, ASME A17.1/CSA B44 PROJECT: EXTERNALLY OPERABLE, FUSED MOTOR CIRCUIT SWITCH OR CIRCUIT BREAKER. MUST BE LOCKABLE IN THE OPEN POSITION. THIS DISCONNECTING MEANS SHALL DISCONNECT THE NORMAL POWER SERVICE AS WELL AS EMERGENCY POWER SERVICE, WHEN PROVIDED. CANNERY TRAILS NOTE 1: IF A CIRCUIT BREAKER IS TO BE PROVIDED IN LIEU OF FUSETRONS, AN ADJUSTABLE TIME-DELAY STYLE IS RECOMMENDED. ACCESS INTEGRATION/SECURITY (WHEN SPECIFIED IN OUR BID PROPOSAL) NOTE 2: IF A BATTERY-POWERED RESCUE DEVICE IS REQUIRED, THE ABOVE-MENTIONED DISCONNECT MUST HAVE AN AUXILIARY CONTACT 87. OUR PROPOSAL INCLUDES KONE LOGIC AND PROVISIONS FOR THE SPECIFIED TOUCHSCREEN(S), KEYPAD DESTINATION OPERATING ECOSPACE 18.1-1 MONITORED BY ELEVATOR CONTROLLER THAT IS POSITIVELY OPENED MECHANICALLY AND IS NORMALLY CLOSED (NC) WHEN THE MAIN POWER PANEL(S), MONITORING SYSTEM(S) AND MULTI-MEDIA EQUIPMENT. IS IN THE ON POSITION, AND IS NORMALLY OPEN (NO) WHEN POWER IS IN THE OFF POSITION. 88. CARD RÉADERS AND/OR ANY ADDITIONAL REQUIRED HARDWARE & SOFTWARE FOR PROPER FUNCTIONALITY OF ACCESS CONTROL/SECURITY ENG/ARCH: NOTE 3: IF A BATTERY—POWERED RESCUE DEVICE IS REQUIRED AND A SEPARATE SHUNT TRIP BREAKER WHICH IS SUBJECT TO EITHER THE SYSTEM(S) SHALL BE FURNISHED AND INSTALLED BY OTHERS. HOISTWAY OR CONTROL SPACE SPRINKLER SYSTEM IS PROVIDED, THE SHUNT TRIP BREAKER MUST HAVE AN AUXILIARY CONTACT THAT IS 89. ANY RÈQUIRED INTERFACE SOFTWARE TO ENSURE PROPER COMMUNICATION BETWEEN KONE CONTROL SYSTEM(S) AND BUILDING SYSTEM(S) CONTRACTOR: POSITIVELY OPENED MECHANICALLY AND IS NO WHEN THE MAIN POWER IS IN THE ON POSITION. NOTE: SHUNT TRIP NOT ALLOWED IN 90. A DESIGNATED 115V 15A CIRCUIT IS REQUIRED AT EACH OF THE REMOTE MONITORING STATIONS. ROYAL CONSTRUCTION INC 61. PROVIDE A DIRECT-IN-DIAL (DID) ANALOG PHONE LINE, ACTIVATED AT LEAST ONE WEEK PRIOR TO INSPECTION, TERMINATED AT THE 91. KONE RECOMMENDS A MINIMUM 100 MBIT/S ETHERNET FOR EACH OF THE FOLLOWING APPLICATION(S): INTEGRATED TOUCHSCREEN/KEYPAD APPROPRIATE PHONE JACKS IN THE ELEVATOR MACHINE ROOM. GC/ OWNER MAY ELECT TO HAVE A SEPARATE ANALOG LINE INSTALLED (ONE DESTINATION OPERATING PANELS, MONITORING SYSTEM, MULTI-MEDIA EQUIPMENT, AND CARD. PER ELEVATOR), OR GC/ OWNER MAY ELECT TO PROVIDE DID LINÉS FROM AN ANALOG STATION CARD IN THE BUILDING'S PBX SYSTEM. IF GC/OWNER PROVIDES A DIRECT-IN-DIAL ANALOG PHONE LINE OR LINES OFF AN EXISTING PBX PHONE SYSTEM, A BACKUP POWER SOURCE MUST ALSO BE PROVIDED. ALL PHONE AND ASSOCIATED EQUIPMENT PROVIDED BY GC/ OWNER SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF ASME A17.1/ CSA B44, LOCAL CODES AND APPLICABLE LAW, AS ÁMENDED. 62. PROVIDE ALL FIRE ALARM INITIATING SIGNALS AS REQUIRED BY ALL NATIONAL, STATE AND LOCAL CODES FOR TERMINATION AT THE PRIMARY ELEVATOR SIGNAL CONTROL CABINET IN EACH GROUP. 63. PROVIDE EMERGENCY POWER TRANSFER SWITCH AND POWER CHANGE PENDING SIGNALS AS REQUIRED; 2 NORMALLY OPEN DRY CONTACTS FROM TRANSFER SWITCH TO CONTROLLER (2 PAIRS PLUS GROUND WIRE). ONE CONTACT CLOSES TO SIGNAL EMERGENCY POWER IS PRESENT, THE OTHER CONTACT CLOSES TO GIVE 30 SECOND PRE-SIGNAL PRIOR TO TRANSFER SWITCH CHANGE. TERMINATION OF THESE WIRES IS AT ITEM NO. NETWORK NO. EQUIPMENT NO. THE PRIMARY ELEVATOR SIGNAL CONTROL CABINET IN EACH GROUP (2 PAIRS PLUS GROUND WIRE.) 64. FURNISH AND INSTALL SMOKE DETECTORS AND FIRE OPERATION PER ASME A17.1/CSA B44 SEC 2.27.3.2, NFPA 72; ONE FOR LOBBY DETECTOR, MACHINE ROOM DETECTOR, HOISTWAY DETECTOR (HOISTWAY DETECTOR REQUIREMENT DETERMINED BY LOCAL CODE), AND ONE FOR ALL GROUPED NON-LOBBY DETECTORS ARE REQUIRED. PROVIDE NORMALLY-CLOSED DRY CONTACTS, WITH WIRING, TO CONTROLLER FOR EACH GROUP LISTED ABOVE. 2019-10-02 | - | KAR 65. PROVIDE AND INSTALL SMOKE DETECTOR IN HOISTWAY AS REQUIRED PER LOCAL CODES, AND IN ALL ELEVATOR LOBBIES, MACHINE ROOM NO BY CK DESCRIPTION DATE This information is confidential and remains the property of kon inc. Its use, reproduction or dissemination without the express permission of kone inc. is strictly prohibited. 66. PROVIDE HEAT DETECTORS AND "SHUNT-TRIP OPERATION" WHEN SPRINKLERS ARE TO BE PROVIDED IN MACHINE ROOM OR HOISTWAY, (ASME A17.1 SEC 2.8.2.1.2, NFPA 13 SEC 4-13.5, ASME A17.1 SEC 2.8.2.3.1, ASME A17.1 SEC 2.8.2.3.2, NFPA 72) 67. IF FIRE STATUS PANEL OR SECURITY PANELS ARE REQUIRED, ALL REMOTE CONDUIT RUNS FROM ELEVATOR EQUIPMENT ROOM/MACHINE SPACE TO THESE PANELS SHALL BE BY OTHERS. 68. NON-ELEVATOR RELATED PIPING AND EQUIPMENT IS PROHIBITED IN MACHINE ROOM OR HOISTWAY (ASME A17.1/CSA B44 SEC 2.8.1, GENERATED ON: 10/02/19 BY: KSW rev ASME A17.1/CSA B44 SEC 2.8.2) 69. PROVIDE AND MOUNT AT MINIMUM A 10-POUND, ABC-TYPE FIRE EXTINGUISHER IN CONTROL SPACE (ASME A17.1 SEC 8.6.1.6.5). (NOT UNITS: IMPERIAL REQUIRED IN CANADA) DRAWING DESCRIPTION SHEET M-3129912-10010 CONTRACT 8 of 1















