

COMcheck Software Version 3.9.2  
Interior Lighting Compliance  
Certificate

2009 IECC

Section 1: Project Information

Project Type: New Construction  
Project Title : Carmax Store #6051  
Construction Site:  
2730 Ross Clark Circle  
DOTHAN, AL 36301

Owner/Agent:  
Designer/Contractor:  
Vernel Jordan  
Gerald Roberts Professional Engineer  
455 East Paces Ferry Road  
Suite 300  
Atlanta, GA 30305  
(404)237-8632 Ext.128  
Vernel@roberts.net

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area (ft <sup>2</sup> )	C Allowed Watts / ft <sup>2</sup>	D Allowed Watts (B x C)
Service 120 (Workshop)	2393	1.4	3330
Retail Showroom (Retail)	4427	1.5	6641
Presentation (Retail)	622	1.5	933
Total Allowed Watts =			10324

Section 3: Interior Lighting Fixture Schedule

Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	Lamps / Fixtures	# of Fixtures	D Fixture Watt.	E (C X D)
Service 120 (Workshop 2393 sq.ft.)				
Linear Fluorescent: A: Bert Wall Washer: Triple 4-pin 20W: Electronic:	2	1	66	66
Linear Fluorescent: B: Fluorescent Troffer: 40" TS 180W: Electronic:	4	9	256	2304
Linear Fluorescent: H1: Linear Fluorescent: 40" TS 28W: Electronic:	2	1	66	66
Linear Fluorescent: P2: Linear Fluorescent: 40" TS 10 54W: Electronic:	4	6	256	1536
Retail Showroom (Retail 4427 sq.ft.)				
Compact Fluorescent: A: Bert Wall Washer: Triple 4-pin 20W: Electronic:	2	6	56	336
Compact Fluorescent: C: CFL Downlight: Triple 4-pin 20W: Electronic:	2	7	56	392
Linear Fluorescent: D: Fluorescent Troffer: 40" TS 28W: Electronic:	2	12	66	792
Linear Fluorescent: DA: Fluorescent Troffer: 22" TS 14W: Electronic:	2	7	34	238
Linear Fluorescent: DB: Fluorescent Troffer: Other Electronic:	2	37	62	2294
Linear Fluorescent: F: Linear Fluorescent: 40" TS 10 54W: Electronic:	4	2	256	512
Linear Fluorescent: H: Fluorescent Strip: 40" TS 28W: Electronic:	1	2	32	64
Linear Fluorescent: SS: Under Cabinet Light: 30" TS 20W: Electronic:	1	2	27	54
Presentation (Retail 622 sq.ft.)				
Linear Fluorescent: P2L: Linear Fluorescent: 40" TS 10 54W: Electronic:	4	6	256	1536
Total Proposed Watts =				10190

Section 4: Requirements Checklist

Interior Lighting PASS/58 Design 1% better than code.

Lighting Wattage:

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1. Total proposed watts must be less than or equal to total allowed watts.

Allowed Watts	Proposed Watts	Complies
10324	10190	YES

- Controls, Switching, and Wiring:
2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
3. Daylight zones have individual lighting controls independent from that of the general area lighting.

- Exceptions:
- Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
  - Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.
  - Independent controls for each space (switch/occupancy sensor).

- Exceptions:
- Areas designated as security or emergency areas that must be continuously illuminated.
  - Lighting in stairways or corridors that are elements of the means of egress.

5. Master switch at entry to hotel/motel guest room.
6. Individual dwelling units separately metered.
7. Medical task lighting or arthroscopic display lighting claimed to be exempt from compliance has a control device independent of the control of the nonexempt lighting.
8. Each space required to have a manual control also allows for reducing the connected lighting load by at least 50 percent by either controlling all luminaires, dual switching of alternate rows of luminaires, alternate luminaires, or alternate lamps, switching the middle lamp luminaires independent of other lamps, or switching each luminaire on each lamp.

- Exceptions:
- Only one luminaire in space.
  - An occupant-sensing device controls the area.
  - The area is a corridor, storeroom, restroom, public lobby or sleeping unit.

9. Areas that use less than 0.6 Watts/ft<sup>2</sup>.

10. Automatic lighting shut-off control in buildings larger than 5,000 sq.ft.
- Exceptions:
- Sleeping units, patient care areas, and spaces where automatic shut-off would endanger safety or security.

11. Photocell/astrometrical time switch on exterior lights.
- Exceptions:
- Lighting intended for 24 hour use.

11. Tandem anti-one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).
- Exceptions:
- Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

Section 5: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.2 and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title Signature Date

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Exterior Lighting Compliance  
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Section 1: Project Information

Project Type: New Construction  
Project Title : Carmax Store #6051  
Exterior Lighting Zone: 4 (High activity metropolitan commercial district)  
Construction Site:  
2730 Ross Clark Circle  
DOTHAN, AL 36301

Owner/Agent:  
Designer/Contractor:  
Vernel Jordan  
Gerald Roberts Professional Engineer  
455 East Paces Ferry Road  
Suite 300  
Atlanta, GA 30305  
(404)237-8632 Ext.128  
Vernel@roberts.net

Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Total Wattage	E Allowed Watts (B x C)	F Proposed Watts (B x C)
Sales Lot (Outdoor sales area/sk)	45967 ft <sup>2</sup>	0.7	Yes	34177	42994
C/E Parking Lot (Parking area)	45966 ft <sup>2</sup>	0.13	Yes	5980	10770
Main Entry (Main entry)	58 ft <sup>2</sup> of door width	30	Yes	80	0
EntrylExit (Other door (not main entry))	58 ft <sup>2</sup> of door width	30	Yes	1160	110
Street Frontage (Sales lot street frontage)	350 ft	30	Yes	10500	0
Total Tradsable Watts =				52710	53864
Total Allowed Supplemental Watts =				1300	

\* Wattage tradeoffs are only allowed between tradable areas/surfaces.  
\*\* A supplemental allowance equal to 1300watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	Lamps / Fixtures	# of Fixtures	D Fixture Watt.	E (C X D)
Sales Lot (Outdoor sales area/sk 45967 ft <sup>2</sup> ): Tradable Wattage				
H/O: OLA: 1000 Watt Metal Halide: Metal Halide: Standard:	3	5	3210	19560
H/O: OLA: 1000 Watt Metal Halide: Metal Halide: Standard:	1	18	1070	19260
H/O: OLA: 400 Watt Metal Halide: Metal Halide: Standard:	2	17	452	7684
C/E Parking Lot (Parking area 45966 ft <sup>2</sup> ): Tradable Wattage				
H/O: OLA: 1000 Watt Metal Halide: Metal Halide: Standard:	2	10	1070	10700
Main Entry (Main entry 58 ft of door width): Tradable Wattage				
EntrylExit (Other door (not main entry) 58 ft of door width): Tradable Wattage				
H/O: DCA: Downlight: Metal Halide: Standard:	1	1	110	110
Street Frontage (Sales lot street frontage 350 ft): Tradable Wattage				
Total Tradable Proposed Watts =				53864

Section 4: Requirements Checklist

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Lighting Wattage:

1. Within each non-tradable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.

Compliance: Please use supplemental allowance watts.

Controls, Switching, and Wiring:

- At exception cases are associated with fixtures that have a control device independent of the control of the nonexempt lighting.
- Lighting not designated for dusk-to-dawn operation is controlled by either a photosensor (with time switch), or an astronomical time switch.
- Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.
- All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.

Exterior Lighting Efficiency:

6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 80 lumens/watt.

- Exceptions:
- Lighting that has been deemed as exempt and is identified as such in Section 3 table above.
  - Lighting that is specifically designated as required by a health or life safety status, ordnance, or regulation.
  - Emergency lighting that is automatically off during normal building operation.
  - Lighting that is controlled by motion sensor.

Section 5: Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.2 and to comply with the mandatory requirements in the Requirements Checklist.

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SYSTEMS SYMBOL LEGEND		
MOUNTING HEIGHT IS FROM FINISHED FLOOR TO CENTERLINE OF DEVICE OR OUTLET. HEIGHT MAY VARY TO COINCIDE WITH BUILDING CONSTRUCTION		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT
[P/M]	PERSONAL VIDEO MONITOR OUTLET. 4" SQUARE X 1-1/2" DEEP OUTLET BOX WITH SINGLE GANG PLASTER RING AND NO COVERPLATE. STUD EMPTY CONDUIT (WITH BUSHING AND FULLSTRING) UP TO 6" ABOVE CEILING.	AS NOTED
[A/P]	ACCESS POINT DATA BOX. 4" SQUARE X 1-1/2" DEEP OUTLET BOX WITH SINGLE GANG PLASTER RING AND NO COVERPLATE. STUD EMPTY CONDUIT (WITH BUSHING AND FULLSTRING) UP TO 6" ABOVE CEILING. (USE 2-1/8" DEEP BOX FOR 1" CONDUITS) OUTLET CONTAINS (2) TELEPHONE AND (2) DATA OUTLETS (JACKS BY OTHERS).	AS NOTED
[D]	DATA OUTLET. 4" SQUARE X 1-1/2" DEEP OUTLET BOX WITH SINGLE GANG PLASTER RING AND NO COVERPLATE. STUD EMPTY CONDUIT (WITH BUSHING AND FULLSTRING) UP TO 6" ABOVE CEILING. (USE 2-1/8" DEEP BOX FOR 1" CONDUITS) OUTLET CONTAINS (2) TELEPHONE AND (2) DATA OUTLETS (JACKS BY OTHERS).	18" AFF. UON
[D]	DATA/TELE. OUTLET. 4" SQUARE X 1-1/2" DEEP OUTLET BOX WITH SINGLE GANG PLASTER RING AND NO COVERPLATE. STUD EMPTY CONDUIT (WITH BUSHING AND FULLSTRING) UP TO 6" ABOVE CEILING. (USE 2-1/8" DEEP BOX FOR 1" CONDUITS) OUTLET CONTAINS (2) TELEPHONE AND (2) DATA OUTLETS (JACKS BY OTHERS).	18" AFF. UON
[Z]	3 PORT TELEVISION BOX. STUD (1) 1-1/2" C (WITH BUSHING + FULLSTRING) UP TO 6" ABOVE CEILING. GENERAL CONTRACTOR TO PROVIDE FLUSH-IN-WALL 4" X 4" X EXTRA DEEP BOX. CARMAX TO PROVIDE COVERPLATE + COMPONENTS.	SEE ARCH ELEVATION
[Q]	4 PORT TELEVISION BOX. STUD (1) 1-1/2" C (WITH BUSHING + FULLSTRING) UP TO 6" ABOVE CEILING. GENERAL CONTRACTOR TO PROVIDE FLUSH-IN-WALL 4" X 4" X EXTRA DEEP BOX. CARMAX TO PROVIDE COVERPLATE + COMPONENTS.	SEE ARCH ELEVATION
[P]	DATA "6-PACK" OUTLET. 4" SQUARE X 2-1/8" DEEP OUTLET BOX WITH SINGLE GANG PLASTER RING AND NO COVERPLATE. STUD EMPTY DEDICATED 1" CONDUIT (WITH BUSHING AND FULLSTRING) UP TO 6" ABOVE CEILING. OUTLET CONTAINS SIX DATA OUTLETS (JACKS BY OTHERS).	18" AFF. UON
[T]	TELEPHONE OUTLET. 4" SQUARE X 1-1/2" DEEP OUTLET BOX WITH SINGLE GANG PLASTER RING AND NO COVERPLATE. STUD EMPTY CONDUIT (WITH BUSHING AND FULLSTRING) UP TO 6" ABOVE CEILING. (USE 2-1/8" DEEP BOX FOR 1" CONDUITS) OUTLET CONTAINS (2) TELEPHONE AND (2) DATA OUTLETS (JACKS BY OTHERS).	18" AFF. UON
[R]	SECURITY KEYPAD FURNISHED BY CHECKPOINT. SINGLE GANG OUTLET BOX WITH EMPTY CONDUIT (WITH BUSHING AND FULLSTRING) UP TO 6" ABOVE CEILING.	60" AFF.
[A]	ANTENNA OUTLET. 4" SQUARE X 1-1/2" DEEP OUTLET BOX WITH SINGLE GANG PLASTER RING AND NO COVERPLATE. STUD EMPTY CONDUIT (WITH BUSHING AND FULLSTRING) UP TO 6" ABOVE CEILING.	18" AFF. UON
[S]	CARD SWIPE. ADI NCP861EL. STUD EMPTY CONDUIT (WITH BUSHING AND FULLSTRING) UP TO 6" ABOVE CEILING. BLANK STAINLESS STEEL COVERPLATE BY CONTRACTOR.	54" AFF.
[S]	P.A. SYSTEM SPEAKER FURNISHED AND INSTALLED AND BY OWNER-PROVIDED LOW VOLTAGE CONTRACTOR. LOCATIONS ARE SHOWN FOR INFORMATION ONLY. REFER TO SOUND SYSTEM RISER DIAGRAM SHEET E4.0.	
[S]	P.A. SYSTEM SOUND SIREN FURNISHED AND INSTALLED BY OWNER-PROVIDED LOW VOLTAGE CONTRACTOR. LOCATIONS ARE SHOWN FOR INFORMATION ONLY. REFER TO SOUND SYSTEM RISER DIAGRAM SHEET E4.0.	
[J]	JUNCTION BOX (4" SQUARE X 1-1/2" X UNLESS OTHERWISE NOTED) WITH BLANK STAINLESS STEEL COVERPLATE BY CONTRACTOR.	AS NOTED
[C]	CEILING MOUNTED CAMERA LOCATION. CAMERA + ASSOCIATED LOW VOLTAGE WIRING FURNISHED + INSTALLED BY LOW VOLTAGE CONTRACTOR. REFER TO CCTV RISER E4.0.	
[C]	WALL MOUNTED CAMERA LOCATION. CONTRACTOR SHALL PROVIDE 4" SQUARE BY 1-1/2" DEEP OUTLET BOX WITH BLANK COVER AND EMPTY CONDUIT WITH BUSHINGS AND FULLSTRING STUBBED TO BAR JOISTS. CAMERA + ASSOCIATED LOW VOLTAGE WIRING FURNISHED + INSTALLED BY LOW VOLTAGE CONTRACTOR. REFER TO CCTV RISER E4.0.	AS NOTED
[SEC]	SECURITY SYSTEM CONTROL PANEL FURNISHED AND INSTALLED BY CHECKPOINT. CONTRACTOR SHALL PROVIDE LOW POWER AND CONDUIT PROVISIONS FOR LOW VOLTAGE WIRING FURNISHED AND INSTALLED BY LOW VOLTAGE CONTRACTOR.	
[M]	MOTION DETECTOR FURNISHED AND INSTALLED BY LOW VOLTAGE CONTRACTOR. CONTRACTOR SHALL PROVIDE 2" X 4" X 1-1/2" DEEP OUTLET BOX WITH CONDUIT STUBBED TO 6" ABOVE CEILING.	8'-6" AFF.
[4-2] (DENOTES FOUR 2" SLEEVES)	CONDUIT SLEEVES THROUGH WALL FOR ROUTING OF LOW VOLTAGE CABLES. QUANTITY AND SIZE AS INDICATED. SEAL PENETRATION THROUGH FIRE WALLS - SEE SHEET G11.	ABOVE CEILING OR HOLD TIGHT TO JOISTS WHERE EXPOSED
OWNER FURNISHED EQUIPMENT:		
THE FOLLOWING EQUIPMENT WILL BE FURNISHED BY OWNER AND INSTALLED BY ELEC. CONTRACTOR UON. THE CONTRACTOR SHALL NOTIFY THE JOHN VAUGHN AT 824-521-4000 EXT 6401 THREE WEEKS PRIOR TO NEEDING EQUIPMENT TO ARRANGE SHIPPING DATE AND SHIP TO ADDRESS.		
THE FOLLOWING EQUIPMENT WILL BE SHIPPED:		
• P.A. AMP CABINET • GATE PEDESTALS • CARD ACCESS PANEL		
THE FOLLOWING EQUIPMENT WILL BE FURNISHED AND INSTALLED BY LOW VOLTAGE CONTRACTOR. (HEREIN REFERRED TO AS LOW VOLTAGE CONTRACTOR). GENERAL CONTRACTOR SHALL ARRANGE FOR RECEIPT AND SECURE STORAGE OF EQUIPMENT ON SITE. THE CONTRACTOR SHALL NOTIFY LOW VOLTAGE CONTRACTOR TO ARRANGE SHIPPING DATE AND SHIP TO ADDRESS.		
THE FOLLOWING EQUIPMENT WILL BE SHIPPED:		
• SECURITY PANEL • CAMERA HARNESSSES • CAMERA BRACKETS • SITE CAMERA CORDS • CAMERA ENCLOSURES • DIGITAL DATA CATCH CABINET		

FIRE ALARM SYMBOL LEGEND		
MOUNTING HEIGHT IS FROM FINISHED FLOOR TO CENTERLINE OF DEVICE OR OUTLET. HEIGHT MAY VARY TO COINCIDE WITH BUILDING CONSTRUCTION		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT
[FAD]	ADDRESSABLE FIRE ALARM CONTROL PANEL. NOTIFIER #FWJ-1000 WITH TWO SIGNAL CIRCUITS, TWO RELAYS, INTEGRAL DUAL-LINE D.A.C.T. BATTERY SIZED FOR 24 HOUR BACK-UP AND 5 MINUTES ALARM. PANEL SHALL BE A UL LISTED CENTRAL STATION.	
[ANN]	REMOTE FIRE ALARM ANNUNCIATOR. NOTIFIER #FDU-80.	60" AFF.
[E]	MANUAL FIRE ALARM PULL STATION. NOTIFIER #BGX-101. PULL STATION SHALL BE ADDRESSABLE AND DOUBLE ACTION.	48" AFF.
[FX]	FIRE ALARM HORN/STROBE UNIT. WHEELLOCK N6 SERIES AUDIO RATE AT 870BA AT 10". SELECTABLE STROBE OUTPUT SET AT 110 CD UNLESS NOTED OTHERWISE.	80" AFF TO BOTTOM
[F]	FIRE ALARM STROBE ONLY UNIT. WHEELLOCK R66 SERIES SELECTABLE STROBE OUTPUT SET AT 110 CD UNLESS NOTED OTHERWISE.	80" AFF TO BOTTOM
[B]	EXTERIOR ELECTRIC FIRE ALARM BELL. NOTIFIER #CNS-6-24.	
[S-D]	ADDRESSABLE DUCT-MOUNTED SMOKE DETECTOR. NOTIFIER #DVK-501 HOUSING WITH SDX-551 SENSOR HEAD. PROVIDE SAMPING TUBE FURNISHED UNDER DIV 16. INSTALLED UNDER DIV 15. WIRED UNDER DIV 16.	
[M]	FIRE ALARM MONITOR MODULE. NOTIFIER #MMX-1.	
[S]	CEILING MOUNTED PHOTOELECTRIC SMOKE DETECTOR. NOTIFIER #DCK-751.	
[F]	WATER FLOW SWITCH CONNECTOR. DEVICE SUPPLIED BY SPRINKLER CONTRACTOR. PROVIDE LIQUID TIE FLEXIBLE CONDUIT FOR FINAL CONNECTION CONFIRM LOCATION WITH SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.	
[T]	TAMPER SWITCH ON OS&Y VALVE. DEVICE SUPPLIED BY SPRINKLER CONTRACTOR. PROVIDE LIQUID TIE FLEXIBLE CONDUIT FOR FINAL CONNECTION CONFIRM LOCATION WITH SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.	
[R]	DUCT SMOKE DETECTOR REMOTE TEST SWITCH. NOTIFIER #RTS/RSKEY.	60" AFF.
[H]	FIRE ALARM MAGNETIC DOOR HOLDER.	

HVAC SYMBOL LEGEND		
MOUNTING HEIGHT IS FROM FINISHED FLOOR TO CENTERLINE OF DEVICE OR OUTLET. HEIGHT MAY VARY TO COINCIDE WITH BUILDING CONSTRUCTION		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT
[N]	NOVAK REMOTE SPACE TEMPERATURE SENSOR FURNISHED, INSTALLED AND WIRED BY DIV 16. (PROVIDE J-BOX AND CONDUIT TO STRUCTURE IN N SERVICE AREA). REFER TO MECHANICAL PLANS FOR LOCATIONS.	72" AFF
[T]	THERMOSTAT FURNISHED AND INSTALLED BY DIV 15. OUTLET BOX, CONDUIT AND 120V CONTROL WIRING FURNISHED AND INSTALLED UNDER DIV 16. REFER TO MECHANICAL PLANS FOR LOCATIONS AND MOUNTING HEIGHTS.	SEE MECH
[A]	0 - 60 MINUTE TIMER SWITCH (INTERMATIC #F SERIES OR EQUAL) REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION AND MOUNTING HEIGHT.	SEE MECH
[S]	LOW VOLTAGE NOVAK CONTROL WIRING BY DIVISION 16. COORDINATE ALL REQUIREMENTS WITH NOVAK AND DIVISION 15.	
[S]	STARTER SWITCH FOR MANUAL CONTROL OF CARBON MONOXIDE FANS FURNISHED AND INSTALLED AND WIRED BY DIVISION 16.	60" AFF
[S-D]	DUCT MOUNTED SMOKE DETECTOR FURNISHED UNDER DIVISION 16. INSTALLED UNDER DIVISION 15 AND WIRED UNDER DIVISION 16. REFER TO FIRE ALARM SYMBOL LEGEND SHEET E3.4. PROVIDE FIRE ALARM WIRING AND RELAYS AS REQUIRED FOR GLOBAL SHUT-DOWN OF RTUs IF REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION. DUCT DETECTOR INSTALLED IN RETURN DUCT UNLESS NOTED OTHERWISE ON MECHANICAL PLANS.	
[R]	DUCT SMOKE DETECTOR REMOTE TEST SWITCH. NOTIFIER #RTS/RSKEY.	60" AFF
[S]	CO2 SENSOR FURNISHED AND INSTALLED BY DIVISION 15. OUTLET BOX, CONDUIT AND 120V CONTROL WIRING FURNISHED AND INSTALLED UNDER DIVISION 16. REFER TO MECHANICAL PLANS FOR LOCATION AND MOUNTING HEIGHTS.	

SYMBOL LEGEND		
MOUNTING HEIGHT IS FROM FINISHED FLOOR TO CENTERLINE OF DEVICE OR OUTLET. HEIGHT MAY VARY TO COINCIDE WITH BUILDING CONSTRUCTION. DEVICE AND COVERPLATE COLORS MAY VARY DEPENDING ON LOCATION REGARDLESS OF THE SPECIFIED COLOR IN THIS LEGEND. REFER TO SPECIFICATIONS FOR CLARIFICATION OF DEVICE AND COVERPLATE COLORS FOR DIFFERENT AREAS OF THE PROJECT.		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT
[H]	HUBBELL SYSTEM ONE PHONE (1P) BOX/POWER FLOOR BOX #5RFB WITH ALUMINUM TILE FLANGE AND COVER #5RFLA SUB-PLATE #5RSP WITH ISOLATED GROUND DUPLEX RECEPTACLE. PROVIDE 3/4" CONDUIT FOR POWER (SEE PLANS FOR CIRCUITING INFORMATION). PROVIDE ONE 1-1/2" CONDUIT WITH PULL STRING TO 6" ABOVE ACCESSIBLE CEILING FOR LOW-VOLTAGE CABLING. SEE DETAIL 2/E5.2.	
[H]	HUBBELL SYSTEM ONE DATA/POWER FLOOR BOX #5RFB WITH ALUMINUM TILE FLANGE AND COVER #5RFLA SUB-PLATE #5RSP WITH ISOLATED GROUND DUPLEX RECEPTACLE. PROVIDE 3/4" CONDUIT FOR POWER (SEE PLANS FOR CIRCUITING INFORMATION). PROVIDE ONE 1-1/2" CONDUIT WITH PULL STRING TO 6" ABOVE ACCESSIBLE CEILING FOR LOW-VOLTAGE CABLING. SEE DETAIL 2/E5.2.	
[S]	SINGLE RECEPTACLE OUTLET - 20 AMP, 3 WIRE, GROUNDING TYPE PROVIDE GRAY DEVICE WITH SATIN FINISH STAINLESS STEEL COVERPLATE.	18" AFF.
[S]	DUPLEX RECEPTACLE OUTLET - 20 AMP, 3 WIRE, GROUNDING TYPE PROVIDE GRAY DEVICE WITH SATIN FINISH STAINLESS STEEL COVERPLATE.	18" AFF.
[S]	QUADRAFLEX RECEPTACLE OUTLET - 20 AMP, 3 WIRE, GROUNDING TYPE PROVIDE GRAY DEVICE WITH SATIN FINISH STAINLESS STEEL COVERPLATE.	18" AFF.
[S]	DUPLEX RECEPTACLE OUTLET - 20 AMP, 3 WIRE, GROUNDING TYPE ISOLATED GND PROVIDE ORANGE DEVICE WITH SATIN FINISH STAINLESS STEEL COVERPLATE.	18" AFF.
[S]	QUADRAFLEX RECEPTACLE OUTLET - 20 AMP, 3 WIRE, GROUNDING TYPE ISOLATED GND PROVIDE ORANGE DEVICE WITH SATIN FINISH STAINLESS STEEL COVERPLATE.	18" AFF.
[S]	DUPLEX GROUND FAULT CIRCUIT INTERRUPTER TYPE RECEPTACLE OUTLET - 20 AMP, 3 WIRE, GROUNDING TYPE PROVIDE GRAY DEVICE WITH SATIN FINISH STAINLESS STEEL COVERPLATE. EACH RECEPTACLE SHALL HAVE INTEGRAL GFI PROTECTION. FEED THRU PROTECTION FROM ANOTHER GFI RECEPTACLE IS NOT ACCEPTABLE. TRIPPING OF SINGLE GFI RECEPTACLE SHALL NOT INTERRUPT POWER TO RECEPTABLES CIRCUITED DOWNSTREAM.	18" AFF.
[S]	QUADRAFLEX GROUND FAULT CIRCUIT INTERRUPTER TYPE RECEPTACLE OUTLET - 20 AMP, 3 WIRE, GROUNDING TYPE PROVIDE GRAY DEVICE WITH SATIN FINISH STAINLESS STEEL COVERPLATE. EACH RECEPTACLE SHALL HAVE INTEGRAL GFI PROTECTION. FEED THRU PROTECTION FROM ANOTHER GFI RECEPTACLE IS NOT ACCEPTABLE. TRIPPING OF SINGLE GFI RECEPTACLE SHALL NOT INTERRUPT POWER TO RECEPTABLES CIRCUITED DOWNSTREAM.	18" AFF.
[S]	WEATHER RESISTANT DUPLEX GROUND FAULT CIRCUIT INTERRUPTER TYPE RECEPTACLE - 20 AMP, 3 WIRE, GROUNDING TYPE PROVIDE GRAY DEVICE WITH SATIN FINISH STAINLESS STEEL COVERPLATE. EACH RECEPTACLE SHALL HAVE INTEGRAL GFI PROTECTION. FEED THRU PROTECTION FROM ANOTHER GFI RECEPTACLE IS NOT ACCEPTABLE. TRIPPING OF SINGLE GFI RECEPTACLE SHALL NOT INTERRUPT POWER TO RECEPTABLES CIRCUITED DOWNSTREAM. PROVIDE CAST ALUMINUM WEATHERPROOF IN-USE COVER (HUBBELL #W26M OR EQUAL).	18" AFF.
[S]	SPECIAL RECEPTACLE OUTLET AS NOTED PROVIDE GRAY DEVICE WITH SATIN FINISH STAINLESS STEEL COVERPLATE.	
[J]	JUNCTION BOX WITH COVERPLATE (COVERPLATE BY CONTRACTOR)	
[R]	RECEPTACLE POWER REEL. SEE DETAIL 2/E5.4	
[LA-1]	CIRCUIT HOMERUN WPANEL DESIGNATION + CIRCUIT NUMBER CROSS HATCHING REPRESENTS ISOLATED GROUND WIRE, NEUTRAL WIRE, AND HOT (PHASE) WIRE RESPECTIVELY. ARROW REPRESENTS HOMERUN. GROUND WIRE (NOT SHOWN) SHALL BE SIZED PER NEC AND INSTALLED IN EACH RACEWAY.	
[M]	MULTI-CIRCUIT HOMERUNS, EACH PHASE CONDUCTOR TO HAVE INDIVIDUAL NEUTRAL CONDUCTOR PLUS AN EQUIPMENT GROUNDING CONDUCTOR. SHARED NEUTRALS ARE NOT ALLOWED.	
[C]	CONDUIT CONCEALED IN WALL OR ABOVE CEILING	
[C]	CONDUIT CONCEALED IN SLAB-IN GROUND OR UNDERFLOOR	
[C]	CONDUIT EXPOSED	
[F]	FLEXIBLE CONDUIT	
[S]	DISCONNECT SWITCH - SIZE AS INDICATED SEE SPECIFICATIONS 16-440 FOR MORE INFORMATION.	
[S]	MOTOR STARTER FURNISHED AND INSTALLED UNDER DIVISION 16. SEE SPECIFICATIONS 16-480 FOR MORE INFORMATION.	
[S]	WEATHERPROOF PUSH-BUTTON	48" AFF.
[S]	AUDIBLE SIGNAL DEVICE - EDWARDS #340A-N5	10'-0" AFF.
[S]	THREE PUSH-BUTTON STATION. FURNISHED BY DOOR MANUFACTURER CONTRACTOR SHALL PROVIDE RECESSED OUTLET BOX FOR CONTROLLERS NOTED WITH "R" NOTATION. CONTRACTOR SHALL SURFACE MOUNT CONDUIT FOR SURFACE MOUNTED CONTROLLERS NOTED WITH "S" NOTATION.	54" AFF.
[O]	INCANDESCENT, FLUORESCENT, OR HID LIGHT FIXTURE - CEILING MOUNTED	
[O]	INCANDESCENT, FLUORESCENT, OR HID LIGHT FIXTURE - CEILING MOUNTED ON 24 HOUR SECURITY (NIGHT) LIGHTING CIRCUIT	
[O]	INCANDESCENT, FLUORESCENT, OR HID LIGHT FIXTURE - WALL MOUNTED	AS NOTED
[O]	INCANDESCENT, FLUORESCENT, OR HID LIGHT FIXTURE - WALL MOUNTED ON 24 HOUR SECURITY (NIGHT) LIGHTING CIRCUIT	AS NOTED
[O]	2' X 4' FLUORESCENT LIGHT FIXTURE	
[O]	2' X 4' FLUORESCENT LIGHT FIXTURE ON 24 HOUR SECURITY (NIGHT) LIGHTING CIRCUIT	
[S]	EXIT SIGN - DARKENED SECTION(S) OF SYMBOLS INDICATE FACES. ARROWS INDICATE DIRECTIONAL CHEVRONS	
[S]	EMERGENCY BATTERY REMOTE TEST/PILOT SWITCH SEE LIGHTING FIXTURE SCHEDULE SHEET E2.2	
[S]	POLE MOUNTED FIXTURE	
[S]	DOUBLE HEAD BATTERY POWERED EMERGENCY LIGHTING FIXTURE	
[S]	FLUORESCENT LIGHT FIXTURE 81RIP	
[S]	FLUORESCENT LIGHT FIXTURE 81RIP ON 24 HOUR SECURITY (NIGHT) LIGHTING CIRCUIT	
[S]	COMBINATION EXIT SIGN DOUBLE HEAD BATTERY POWERED, DARKENED SECTION OF SYMBOL INDICATES FACE.	
[S]	8 P.S.T. LIGHTING SWITCH.	48" AFF.