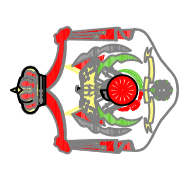


تعداد	


  
 وزارة الطاقة والمياه  
 المملكة العربية السعودية

شركة  
 هندسة  
 واستشارات  
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 تقنية  
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مكتب  
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 الرياض - الرياض  
 المملكة العربية السعودية  
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SUBOH CONSULTING ENGINEERS  
 SUBOH CONSULTING ENGINEERS  
 SUBOH CONSULTING ENGINEERS

المنطقة	جوش
رقم القطعة	٦٧
التنظيم	مباني عامه
رقم الحوض	٢
اسم الحوض	البلد
اسم الشركة	
رقم الترخيص	١٧/٨
رقم الترخيص	١٠١

## LIGHTING SYSTEM

FITURE REF.	SYMBOL	DESCRIPTION	IP	LAMP CHARACTERISTICS				MOUNT	
				NO OF LAMP	POWER WATT / LAMP	LUMEN / LAMP	CLRT		CRF
L1		LED PANEL LIGHTING FIXTURE, HOUSING MADE OF HIGH QUALITY SHEET STEEL PAINTED WITH WHITE EPOXY POLYESTER POWDER, SMOOTH OPAL POLY-CARBONATE DIFFUSER.	20	1	34W	3400	3000K 6000K	> 80	RECESSED
L2		DITTO (L1) BUT WITH EMERGENCY KIT.	20	1	34W	3400	3000K 6000K	> 80	RECESSED
L3		LED PANEL LIGHTING FIXTURE, HOUSING MADE OF HIGH QUALITY ALUMINIUM OR SHEET STEEL PAINTED WITH POLYESTER WHITE RESIN.	20	1	49W	4800	3000K 6000K	> 80	SURFACE
L4		DITTO (L3) BUT WITH EMERGENCY KIT.	20	1	49W	4800	3000K 6000K	> 80	SURFACE
L5		LED PANEL LIGHTING FIXTURE, HOUSING MADE OF HIGH QUALITY ALUMINIUM OR SHEET STEEL PAINTED WITH WHITE EPOXY POLYESTER POWDER, SMOOTH OPAL POLY-CARBONATE DIFFUSER.	20	1	49W	4800	3000K 6000K	> 80	SURFACE
L6		DITTO (L5) BUT WITH EMERGENCY KIT.	20	1	49W	4800	3000K 6000K	> 80	SURFACE
L7		LED PANEL LIGHTING FIXTURE, HOUSING MADE OF HIGH QUALITY ALUMINIUM OR SHEET STEEL PAINTED WITH WHITE EPOXY POLYESTER POWDER, SMOOTH OPAL POLY-CARBONATE DIFFUSER.	44	1	24W	2500	3000K 6000K	> 80	SURFACE
L8		DITTO (L7) BUT WITH EMERGENCY KIT.	44	1	24W	2500	3000K 6000K	> 80	SURFACE
L9		DOWNLIGHT LED PANEL LIGHTING, HOUSING MADE OF HIGH-PURITY ALUMINIUM, OPAL DIFFUSER.	20	1	29W	2900	3000K 6000K	> 80	SURFACE
L10		DOWNLIGHT LED PANEL LIGHTING, HOUSING MADE OF HIGH-PURITY ALUMINIUM, OPAL DIFFUSER.	20	1	29W	2900	3000K 6000K	> 80	RECESSED
L11		DITTO (L10) BUT WITH EMERGENCY KIT.	20	1	29W	2900	3000K 6000K	> 80	RECESSED
L12		DOWNLIGHT LED PANEL LIGHTING, HOUSING MADE OF HIGH-PURITY ALUMINIUM, OPAL DIFFUSER.	44	1	15W	1500	3000K 6000K	> 80	RECESSED
L13		CYLINDRICAL DOWNLIGHT LED LIGHTING FIXTURE, HOUSING MADE OF HIGH-PURITY ALUMINIUM, COB TYPE NARROW BEAM WITH WHITE COVER.	54	1	10W	1000	3000K 6000K	> 80	SURFACE
L14		LED PANEL LIGHTING FIXTURE, HOUSING MADE FROM HIGH QUALITY STEEL PAINTED WITH ELECTROSTATIC POWDER, OPAL DIFFUSER, FOR SINK, 60CM LONG.	44	1	10W	1000	3000K 6000K	> 80	WALL

## LIGHTING SYSTEM

FITURE REF.	SYMBOL	DESCRIPTION	IP	LAMP CHARACTERISTICS				MOUNT	
				NO OF LAMP	POWER WATT / LAMP	LUMEN / LAMP	CLRT		CRF
L15		LED BULBS LIGHTING BULKHEAD LIGHT WITH GRILL FIXTURE, BODY AND REFLECTOR MADE FROM ALUMINIUM MATERIAL.	66	1	20W	2000	3000K 6000K	> 80	WALL
L16		LED UP AND DOWN LIGHTING FIXTURE WITH DIFFERENT ANGLE BEAM, HOUSING, BODY, GLAND, ... etc MADE OF HIGH QUALITY ALUMINIUM WITH RUBBER AND ALL ACCESSORIES, CLEAR DIFFUSER, SEALED AND TEMPERED GLASS.	66	2	5W	500	3000K 6000K	> 80	WALL
L17		LED TUBULAR LIGHTING FIXTURE, HOUSING MADE OF HIGH QUALITY SHEET STEEL PAINTED WITH ELECTROSTATIC POWDER PAINT, HALF REFLECTOR, FOR BOARD.	20	1	18W	1800	3000K 6000K	> 80	WALL
L18		LED EMERGENCY EXIT LIGHTING FIXTURE, STEEL POWDER COATED, WHITE FINISH BODY, CLEAR ACRYLIC WITH PRE APPLIED SCREEN PRINT LEGEND, AND BATTERY MAINTAINED FOR NOT LESS THAN THREE HOURS WITH SUITABLE DIRECTION AND DOUBLE FACE.	30	1	6W	600	4000K	> 80	PERPENDICULAR WALL
L19		LED EMERGENCY LIGHTING FIXTURE, STEEL POWDER COATED, WHITE FINISH BODY, CLEAR ACRYLIC WITH PRE APPLIED SCREEN PRINT LEGEND, AND BATTERY NON MAINTAINED FOR NOT LESS THAN THREE HOURS SINGLE SIDED PANEL.	30	1	6W	600	4000K	> 80	WALL
L20		LED BULBS LIGHTING BULKHEAD LIGHT WITH GRILL FIXTURE, BODY AND REFLECTOR MADE FROM ALUMINIUM MATERIAL, FOR LIFT SHAFT.	64	1	20W	2000	3000K 4000K	> 80	WALL
L21		LED FLOOD LIGHT, FULLY DIE-CAST ALUMINIUM BODY WITH GLASS COVER AND ADJUSTABLE BRACKET.	66	1	100W	10000	3000K 6000K	> 80	WALL
L22		LED FLOOD LIGHT, FULLY DIE-CAST ALUMINIUM BODY WITH GLASS COVER AND ADJUSTABLE BRACKET.	66	1	50W	5000	3000K 4000K	> 80	WALL H=2m
	NOTE:								
	1-	THE WORKING LIFETIME FOR ALL LIGHTING UNIT >= 50000h, AND 3 YEARS WARRANTY.							
	2-	THE EFFICACY FOR ALL LIGHTING UNIT >= 100 lum/w (AS ABOVE TABLE).							
	3-	THE MACADAM FOR OUTDOOR UNIT LIGHTING UNIT < 2, FOR INDOOR UNIT LIGHTING UNIT < 3, AND WITH HEATSINK.							
	4-	THE COLOR CHARACTERISTIC AND PROTECTION DEGREE (IP) FOR ALL LIGHTING UNIT DEPEND ON FUNCTION AND LOCATION, THE IMPACT MECHANICAL FOR EXTERNAL LIGHTING NOT LESS THAN (IK > 08).							
	5-	"E" MEANS BATTERY KIT IN ORDER TO OPERATE THE LIGHTING FIXTURE IN CASE OF POWER FAILURE FOR NOT LESS THAN THREE HOURS.							
	6-	ALL WATER PROOF INTERNAL AND EXTERNAL LIGHTING UNIT WILL BE WITH ORIGINAL FITTINGS AND WITH WATER PROOF INSTALLATION ACCESSORIES FROM THE MANUFACTURE COMPANY.							

SYMBOL	DESCRIPTION
	10A ONE WAY LIGHTING SWITCH: ONE GANG.
	10A ONE WAY LIGHTING SWITCH: TWO GANG.
	10A ONE WAY LIGHTING SWITCH: THREE GANG.
	10A TWO WAY LIGHTING SWITCH: ONE GANG.
	10A TWO WAY LIGHTING SWITCH: TWO GANG.
	10A INTERMEDIATE LIGHTING SWITCH: ONE GANG.
	10A ONE WAY SWITCH FOR EX-FANS WITH PILOT LAMP: ONE GANG.
	10A UP AND DOWN SWITCH FOR MOTORIZED SCREEN.