

## Chapter D Luminaires

		rage
1.0	Basic Requirements	108
2.0	Electrical	108
2.1	Electrical Wiring	108
2.2	Earthing	108
3.0	Mechanical	108
3.1	Materials	109
3.1.1	Steel	109
3.1.2	Stainless Steel	109
3.1.3	Aluminium Sheet	109
3.1.4	Cast Aluminium – Extruded Aluminium	109
3.1.5	Plastics, PVC, Acrylic, etc.	109
3.1.6	Glass	109
3.1.7	Ceramics	109
4.0	Construction	110
		110
5.0 5.1	Optical Control	110
5.1	Reflectors	
5.2	Refractors	114
5.3	Diffusers	114
5.4	Baffles	114
5.5	Louvres	116
5.6	Filters	117
5.7	Luminaire Efficiency	118
5.8	Thermal	120
5.9	Environmental	120
6.0	Luminaire Types	120
6.1	Exterior Lighting	120
6.1.1	Road Lighting Luminaires	120
6.1.2	Post-Top Luminaires	121
6.1.3	Secondary Reflector Luminaires	123
6.2	Floodlights	123
6.3	Wall-mounted Luminaires	124
6.4	In-Ground (Above-Ground)	
	Up-Lights, Directional Lights	125
7.0	Certification and Classification	127
7.1	Certification	127
7.2	European (EU) Standards and Safety Trade Marks	127
7.3	United States of America (US) Standards	
	and Safety Trade Marks	132
7.3.1	The ANSI/UL 153 Standard	133
7.3.2	The ANSI/UL 1598 Standard	133
7.3.3	The ANSI/UL 8750 Standard	134
7.4	International used Standards and Safety Trade Marks	135
7.4.1	Operating Conditions (IP-Rating)	135
7.4.2	IK Code and Impact Energy	137
7.4.3	Electrical Protection	138
7.4.4	Separated or Safety Extra-Low Voltage (SELV)	139
7.4.5	Class II Insulation	140
7.4.6	Flammability	141
7.4.6 7.5	ADQCC and ESMA	141
7.5 7.5.1		142
7.5. I	Abu Dhabi Quality and Conformity Council (ADQCC)	142