Concept for the building essay



The building is a four-bedroom 2 storey Duplex with a double garage, ensuite to main bedroom, and in-ground swimming pool. The Duplex will have two blocks of crystal like buildings crafted in accordance to the outline of the site. The general outlook of the building will be dynamic and modern. The house will have 4-tiers of double pitch dynamic soaring roof form with a glass facade supported by steel columns and long span steel roof trusses. The steel columns will be square. The building is oriented to face the beach, and people passing by will marvel at it. It will have a huge dining room, interior of which will feature a timber wall with blue colored LED lights. The lights in the dining room will create serene atmosphere of the ocean and create an impression of sitting by the beach while eating. Since the building is located near the ocean, it will also feature an exotic kitchen full of seafood. It will give a completely new experience of dining at the beach. Given that the kitchen area is small, it will have a small round table with two chairs. The dining room is larger than the kitchen and can, therefore, accommodate many guests.

The roof will be a dynamic one fitted with horizontal aerofoil sun louvers. The building will also have open wooden staircases, a rooftop sundeck to watch the ocean, and a spacious balcony on its top. The balcony will create an atmosphere of relaxation and serene ambiance for those who are tired and want to relax. It will also provide unique dinner experience while overlooking the ocean. There will also be a small bar beside the living room for those who want to have a drink. A number of palm trees will be planted along the pathway from the house to the seaside. This pathway will be well lit with lanterns to create a tranquil atmosphere for evening walks. The master

bedroom will be larger than the other three. They will all be painted in blue. The master bedroom will have one wall entirely painted with scenery of the beach to create a relaxing effect. The double garage will be made of wood while the floor will have gravel on it. The in-ground swimming pool will be round. The whole house will create a feeling of being near the ocean with a help of its relaxing environment. It will be a perfect holiday destination for those who want to relax near the beach after long working days in the office. The ambience of the building will be marvelous.

Australian Standards

There are about 5750 Australian Standards developed by various technical committees consisting of approximately 8500 members. More than 20% of these standards are on building and construction. These standards specify and set criteria for building designs, materials, testing procedures, manufacture, and construction practices. Those that will affect the building include Dead & Live Loads (AS 1170. 1 - 1989), Wind Loads (AS 1170. 2 -1989), Snow Loads (AS 1170. 3 - 1990), Earth Quake Loads (as 1170. 4 -1993), Selection and Installation of Glass in Buildings (AS 1288 - 1994), Testing Methods of Soil for Engineering Purposes (AS 1289 - SET), Kitchen (AS 1351. 1 - 1974), Interior Lighting (AS 1680), National Timber Framing (AS - 1684), Safety for Swimming Pools (AS - 1926), Fencing for Swimming Pools (AS 1926. 1 – 1993), Windows in Buildings (AS 2047 – 1999), Roof Tiles (AS 2049 - 1992), Roof iles Installation (AS 2050-1995), Demolition of Structures (AS 261 – 1991), Painting of Buildings (AS 2311-1992), Gypsum Board (AS 2588 - 1998), Gypsum Linings (AS 2589), Doors - Timber (AS 2688 - 1984), Security Screen (AS 2803), Hinges (AS 2803. 1 - 1995), Sliding (AS

2803. 2 - 1996), Slabs and Footings for Construction - Residential (AS 2870 -1996), Flashings and Damp-Proof Courses (AS 2904 - 1995), Wiring Rolls (AS 3000 - 2000), National Plumping and Drainage (AS 3500), Concrete Structures (AS 3600-1994), Concrete Construction (AS 3600 - 2001), Domestic Metal Framing (AS 3623 - 1993), Termite Proofing - Detection and Prevention (AS 3660 - 1993), Masonry Structures (AS 3700 - 2001), Guide to Residential Pavements (AS 3727 - 1993), Water Proofing in Residential Buildings (AS 3740 - 1994), Smoke Alarms (AS 3786 - 1993), Guidelines for Earth Works for Residential and Commercial Developments (AS 3798 -1996), Pre-cast and Tilt-up Concrete Elements (AS 3850), Performance Standards in Buildings (AS 3854), Ceramic Tiles (AS 3958), Building Construction in Bushfire prone Areas (AS 3959 - 1999), Wind Loads for Housing (AS 4055 - 1992), Steel Structures (AS 4100 - 1998), Sky Lights (AS 4285 - 1995), Building Inspection (AS 4349), Residential Property Inspections (AS 4349. 1 – 1995), Timber Inspection for Pests (AS 4349. 3), Kitchen Assemblies - Domestic (AS 4386), Kitchen Units (AS 4386. 1 - 1996), Installation (AS 4382. 2 - 1996), Domestic Solar Water Heating System (AS 4455), and Domestic Garage Doors (AS 4505 - 1998) (CIV/DIPBC 2010).

Building Codes

The Australian Building Codes Board (ABCB) is the authorized body to prepare the Building Codes of Australia (BCA). The BCA has two volumes that will be relevant for the building process. The Volume 1 deals with Class 2 to Class 9 Buildings. Its sections include (1) General Provisions, (2) Structure, (3) Fire Resistance, (4) Access and Egress, (5) Service and Equipment, (6) Health and Amenity, (7) Ancillary provisions, (8) Special Use Buildings, (9) https://assignbuster.com/concept-for-the-building-essay/

Maintenance, and (10)Energy Efficiency. Each of these sections is further classified into subsections and clauses. Volume 2 deals with Class 1 to Class 10 Buildings, i. e. housing provisions. This volume consists of (1) General Requirements, (2) Performance Provisions, and (3) Acceptable Construction. Like in volume 1, each of these sections is further classified into subsections with explanatory information. In addition, each section specifically marks state and territory variations (CIV/DIPBC 2010).

Regulation and Legislation

The Building Act of 2004 regulates building and building related works in the Australian Capital Territory. The regulations and legislation that will affect the building include building approvals, building commencement notices, carrying out and completion of building works, offences, stop and demolition notices, certification of occupancy and other certificates, statutory warranties, insurance and fidelity certificates, appointment of auditors and actuaries of approved schemes, appointment of building inspectors, approval of building code and recognized standards, limitation of liability, notification and review of decisions. There are also other miscellaneous guidelinnes, such as sustainability guidelines, services of notices, recovery of cost of works carried out by inspector, evidentiary certificates, and legal liability.

These are additional legislations, regulations, codes, and standards, which include (1)ACT Planning and Land Authority under Construction Occupations (Licensing) Act 2004 for construction occupations,(2) ACT Planning and Land Authority under Electricity Safety Act 1971 and Gas Safety Act 2000, (3)Department of Territory and Municipal Services for environmental

protection and nature preservation under Environment Protection Act1997 and Nature Conservation Act 1980, (4) ACT Planning and Land Authority for fences and party walls under Common Boundaries Act 1981, (5) Department of Territory and Municipal Services for heritage preservation under Heritage Act 2004, (6)ACT Planning and Land Authority for land use and development control under Planning and Development Act 2007, (7) Department of Justice and Community Safety for machinery scaffolding and lifts under Machinery Act 1949, (8) Department of Justice and Community Safety for Occupational Health and Safety under Occupational Health and Safety Act 1989 and Work Safety Act 2008, (9) ACT Health for Public Health under Public Health Act 1997, (10) Department of Territory and Municipal Services for Roads and Public Places under Roads and Public Places Act 1937, (11) ACT Planning and Land Authority, Department of Justice and Land Authority, Department of Justice and Community Safety, Department of Territory and Municipal Services, and Department of Treasury for Utilities under Utilities Act 2000, (12) Department of Territory and Municipal Services for Waste under Waste Minimization Act 2001, and (13) ACT Planning and Land Authority for Water and Sewerage, under Water and Sewerage Act 2000 (CIV/DIPBC 2010).

Other legislations and regulations might be applicable to the building process. These include Workers Compensation Act 1951, Australian Capital Territory Planning & Land Management Act 1988, National Environmental Protection Council Act 1991, Construction Occupations (Licensing) Regulation Act 2004, Dangerous Substances (General) Regulation 2004, Electricity (Greenhouse Gas Emissions) Regulation 2004, Tree Protection Act 2007, Heritage Regulation 2006, Water Resources Regulation 2007, Workers

Compensation Regulation 2002, Surveyors Act 2007, Planning and Development Regulation 2008, Environmental Protection Regulation 2004, National Gas (Australian Capital Territory) Act 2009, Building (General) Regulation 2008, and Electrical Safety Regulation and Occupational Health & Safety (General) Regulation. Further, the municipal council administers fire protection requirements. The relevant legislation will include the Building Act 1993 and Building Regulations 2006.

In conclusion, Australia has one of the best legislation, regulations, standards, and building codes in the world. These standards are followed by the commonwealth, state, and territory administrations. Authorities in Australia ensure that these standards are strictly followed in order to achieve and maintain "uniform set of technical provisions, acceptable standards of structural sufficiency, safety, health, and amenity (CIV/DIPBC 2010)". Many of the additional territorial provisions are nondescript and indicative in nature. They are used mainly for guidance and do not substitute the Commonwealth Provisions.