

Planning Department
Building Control Unit
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BCU POLICY STATEMENTS

As allowed under section 103.6 & 103.7 of the Cayman Islands Building Code

CIBC means the Cayman Islands Building Code 2006 Revision. NEC means the National Electrical Code 2005 Edition. SPC means the Standard Plumbing Code 1997 edition.

The following shall be the policies of the Building Control Unit.

Policy 1: No policy shall be enacted or enforced prior to a public service advisory period, wherein parties may familiarize themselves with aspects of said policy.

Reason: The Department has a responsibility to inform the public and give a due time period of acclimatization to changes in procedure, which may include referencing resources (new and existing). Notification periods and mediums may vary depending on the nature of the Policy.

Policy 2: A Life Safety / Building Code Analysis shall be submitted by the agent for all Commercial/Multi-Family and Change-of-Use applications. This can be on separate letter sized pages or incorporated into the drawings. A guideline is available on the Department of Planning website at http://www.planning.gov.ky/HTML_BODY/BCU/BCU_Library/Commercial_Building_Code_Review_Form.pdf.

Reason: Many agents are not familiar with major aspects of the code. It is the job of the Plans Examiner to review the plans for code compliance, not to design the particulars of building (i.e. occupancy, type of construction, means of egress, fire ratings) for the agents. This requirement will help the agents learn more about the codes and overall this will help them turn in better quality submittals. This will hopefully improve their Plan Review disapproval rates.

Policy 3: **CIBC 104.1.1** – Add exception 8, which exempts the requirements for a permit for one story detached accessory buildings without plumbing or electricity, and less than 120 square feet.

Add exception 9, which exempts the requirements for a permit for one story (10 feet maximum height), screened enclosures less than 200 SF.

Reason: This policy is intended to exempt minor storage/yard sheds and small screen enclosures without electricity or plumbing from permitting requirements and is consistent with planning and other model code language.

Policy 4: **CIBC 104.2.3** – The specific requirements of other code sections or codes that require a design professional to submit plans for pile, pier and other isolated type foundations as contained in codes such as SSTD 10-99 section 303.4; SBC sections 1804 & 1805 and are specific requirements which take precedence over this general exception for R3 occupancies.

Reason: This topic has caused confusion and should be clarified to be consistent in administering structural safety requirements. These foundation systems are specialized systems and need to be designed by a professional engineer to ensure structural stability.

Policy 5: **CIBC 202** – Area, Building definition: Add “The covered area outside of buildings which have means of egress independent of the main structure may be considered to be outside of the building area if the coverings are for weather protection purposes only and are unconditioned. This includes porches, patios and similar appurtenances”.

Reason: We have had difficulty applying the definitions and protection of structures under walkways etc.

Policy 6: **CIBC 504** – For purposes of building exterior protection requirements, a property lease line shall be considered to be the same as an assumed property line

Reason: Some parcels of land are leased such as Crown lands on 17A are very large and subject to leasehold interest rather than deeded lot lines.

Policy 7: **SSTD 10-99 604 & CIBC 1606.2** – If a single family dwelling is designed as an “enclosed” building, glazed openings shall be protected from windborne debris by products which meet the requirements of the large missile impact test, or approved wood structural panels or shutters per appendix I of the Standard Building Code 1999.

Reason: This is a current requirement which is not being monitored unless buildings are specifically designed as an “enclosed” classification. Compliance prior to final CO would help insure protection from storms is part of a home’s required safety features. Structures designed as “partially enclosed” or “open” under CIBC 1606.2 or ASCE-7 would not require opening protection from windborne debris.

Policy 8: **CIBC 703** – Gypsum sheathing products shall be used in accordance with their listing. In addition, these products are not to be used as finish materials when exposed to weather such as ceilings of carports, verandas, soffits, breezeways etc due to potential water damage.

Reason: The first sentence was meant to clarify those gypsum products such as gold board or gypsum core sheathing approved for exterior use could be installed consistent with their design listing. The reason for this policy stems from the experience during Ivan when regular gypsum board was installed in soffits, ceilings of carports and

other outside locations where wind blown water damage was experienced which then exposed ceiling voids above.

Policy 9: **CIBC 704.3 & 704.4** – Semi-detached, multiple dwellings, on the same parcel of land, designated by the Planning Department as Duplexes, Apartments or Condominiums are to be provided with a fire rating between dwelling units as follows:

1. If the separation distance between the exterior, adjacent, facing walls of dwelling units is 20 feet or greater. Then there would be no required fire rating of the exterior facing walls and no limitation on the percentage of unrated openings in those walls.
2. If the separation distance between the exterior, adjacent, facing walls of dwelling units is at least 10 feet, but less than 20 feet. Then at least one of the adjacent facing walls would have to be fire rated. The openings can be staggered over both walls providing the section of wall opposite the openings are fire rated.
3. If the separation distance between the exterior, adjacent, facing walls of dwelling units is less than 10 feet. Then both facing walls must be fire rated. Also, any openings in these facing walls must also be fire rated.
4. Detached, fully separated buildings shall comply with Table 600 of the CIBC.

Reason: As worded now, there is confusion that Table 600 does not apply to detached/separated buildings. This policy was developed to address semi-detached units approved as apartments, but resembling houses. The apartment description created confusion on tenant walls/separation. Adding “Semi-detached” at the beginning clarifies this problem.

Policy 10: **CIBC 903.6 (Item 7)** – For the purposes of the Sprinkler requirements, the following shall be added:

Exception: all occupancies with garages not exceeding 1200 sq. ft. and for the storage of vehicles.

Reason: This policy was intended to allow small storage garages connected to other occupancies to remain unsprinklered. It is consistent with the intent of the exception to 411.2.9 but does not define the type of vehicle parked inside since this will change to suit the occupant over time.

Policy 11: **CIBC 1005.4** – Egress window type, size, opening dimensions (area, width & height in open position) and required rough opening shall be submitted for review at the time of application.

Reason: Management has identified the lack of clear information regarding egress windows as the key pitfall, resulting in the installation of windows that do not meet the egress requirements. Consequentially, they have decided that this information must formulate an integral part of an application requiring egress windows.

Policy 12: CIBC 1105.4.2 – Type-A & Type-B accessible dwelling units shall not be required for Type R2 & R3 occupancies.

Reason: This requirement (FHAG) originated from the US Fair Housing Amendment act of 1988. This is a United States federal regulation which would not apply in the Cayman Islands.

Policy 13: CIBC 1203.1.3 & 2309.7 – Requirements for ventilation of attic spaces may be omitted if the rafters, gable end-walls and soffits are insulated with either:

1. Spray-in-place insulating foam or
2. Radiant barrier and R-19 min. fiberglass insulation

Additionally, the attic space is to be slightly air conditioned to remove heat and moisture. The attic becomes "Conditioned Space" and ventilation is not required. The ceiling joist areas are not required to be insulated in this case.

Reason: Water intrusion from wind blown rain entering attic spaces which damaged ceilings and building interiors occurred during Ivan. Increasing costs of air conditioning also leads some designers to insulate and seal attic spaces. This can be accomplished successfully in our climate under these specified conditions.

Policy 14: CIBC503.2.3 It shall be the policy of the Building Control Unit that within individual dwelling units, lofts or similar upper level areas with approved stair access may be considered as mezzanines when the area above does not exceed 1/3 the area of the floor or story below.

Reason: This section limits the size of a mezzanine to one third (1/3) of the room or area it serves otherwise this area becomes an additional story. In the case of a small bedroom or loft area within the roof space of an individual dwelling unit, the loft serves the floor below (within that unit), not just a specific room. So a dwelling unit with a 900 sf floor would allow a 300 sf max mezzanine. A 301 sf (+) loft would be considered an additional story.

Policy 15: CIBC 1606.1.1 – Wind live load on roofs per ASCE 7-02 figure 6-3 of the CIBC shall be 20 PSF for roof slopes of 6:12 or less. For roof slopes of 7:12 or steeper, the equivalent pressure shall be 34 PSF. Mean roof heights above 30 feet shall comply with table 1606.2A.

Dead load shall be determined by the type of frame and roof covering specified. Rafters shall be braced to bearing structures below to comply with span limitations required by section 2309.1.1

Roof trusses shall be designed by accepted engineering practice per 2309.2.1 and designs submitted for review prior to hurricane connector and truss installations. Minimum roof sheathing fastening pattern shall be 8d galvanized nails or equivalent, at 4" o/c for edge of panels and 6" o/c field nailing.

- Reason:** The increased roof pitch causes higher positive and negative pressures on roof frames than the 20# load customarily used for residential designs. This reflects modern analysis of these forces based upon ASCE 7. Steeper pitch roofs must be designed to the higher pressure. Occasionally truss frames are built on site without proper analysis or design. This policy reflects the need for a competent engineering analysis.
- Policy 16:** **CIBC 1804.1.7** – Finish grade shall be sloped away from the foundation for drainage *at a rate of 6-inches in 10-feet for the first 60-inches measured from the exterior wall*
- Reason:** The current code addresses drainage; however, does not address the parameters to govern how to accomplish it.
- Policy 17:** **CIBC 2111** – Lintel blocks used in running bond wall construction shall not be permitted for use in lintel construction for spans greater than 72-inches.
- Reason:** The inherent dangers with utilizing standard 6-inch and 8-inch (wide) by 16-inch (long) lintel blocks in the manner described above without aid from a design professional and given the prevailing seismic requirements limit their permissibility in lintel construction for spans exceeding 72-inches. Specialty lintels that are designed and manufactured to completely span openings are unaffected by this requirement pending the review and approval of the relevant data for the product.
- Policy 18:** **CIBC 2304.1.3** – Engineered lumber products such as I-Joist, Parallam beams, LVL rim joist or similar products may be used for the second floor above grade or higher in a structure when completely within the buildings exterior walls' weather barrier. Preservative-treated (PT) sawn structural and engineered lumber products shall be installed where exposed to wet/damp conditions, decay and possible terminate infestation (i.e. floor framing in crawl spaces or on piles, structural lumber near grade or unprotected from the weather). Any methods to enclose, cover or otherwise protect the non PT wood are subject to approval by the CBCO.
- Reason:** Some distinction needs to be made with regard to engineered wood products and structural panels due to termite and decay conditions.
- Policy 19:** **CIBC 3401.2** Replacement of existing structures or portions of structures is to be completed to current code requirements. Practical difficulties may be reviewed on a case by case basis by the Chief Building Control Officer. No exceptions shall be made to required fire resistive construction. Increases in height or area shall comply with table 500. Openings for emergency egress and those openings requiring fire rated protection shall comply with the applicable code sections.
- Reason:** The permissive language in the chapter concerning alterations of existing structures allows flexibility for the Chief Building Control Officer to use discretion in determining basic requirements.

Policy 20: **CIBC 3403.3** – Changes in occupancy which would require access for the disabled shall comply with chapter 11 of the CIBC. Unique or unusual circumstances which would affect these provisions may be reviewed on a case by case basis by the Chief Building Control Officer if services can be provided to the disabled in an acceptable alternate manner.

Reason: The permissive language in the chapter concerning alterations of existing structures allows flexibility for the Chief Building Control Officer to use discretion in determining basic requirements.

Policy 21: **NEC 210.70 - Exterior and interior lighting** (all occupancies)

(1) At least one controlled lighting outlet shall be installed to provide sufficient illumination in hallways, stairways, habitable space, occupiable room, utility rooms, bathrooms, storage spaces and similar areas of buildings.

(2) Lighting outlets shall be provided for Means of Egress illumination in accordance with section 1016 of the Cayman Islands Building Code.

(3) Where one or more lighting outlet(s) are installed for interior and exterior stairways, there shall be a wall switch at each floor level, and landing level that includes an entryway, to control the lighting outlet(s) where the stairway between floor levels has six risers or more.

1. Except for kitchens and bath room; remote, central, or automatic control of lighting shall be permitted.

2. Lighting outlets shall be permitted to be controlled by occupancy sensors that are (1) in addition to wall switches or (2) located at a customary wall switch location and equipped with a manual override that will allow the sensor to function as a wall switch.

Reason: This policy is established to address lighting outlet provisions of the CIBO which are not covered in the NEC (i.e. occupiable rooms and exterior stairway)

Policy 22: **NEC 680** – Lighting fixtures installed in pools and spa be designed for operation on supply circuits not over 16 volts between conductors, unless the pool or spa is a factory assembly and is equipped with GFCI protection.

Reason: This is a long standing policy established to reduce potential shock hazards that are increased by the presence of high voltage.

Policy 23: **NEC 210** – All general purpose lighting and receptacle branch circuit wiring be a minimum of No. 12 AWG copper.

Reason: This is a long standing policy that were established to reduce the possibility of electrical fires as persons were upgrading from the common 15 amp breakers to a 20 amps without upgrading the wiring since it was not accessible in most cases; which resulted in inadequate protection of the circuit wiring.

Policy 24: **NEC 230 & 215** – Buildings or structures shall be supplied by only one metered supply to a tenant space.

Exception:

A tenant space shall be permitted to be served by two metered supplies provided all of the following are satisfied.

- a) Each electrical panel and metering device are Identified with a caution sign as specified by the electrical inspectorate.
- b) Each feeder is individually ran in rigid conduit from the metering device to the appropriate consumer's panel board.
- c) There are no physical connections between each of the metered system (i.e. raceways, wiring methods etc.).

Reason: This policy is established to reduce the likelihood of electrical workmen being subject to increase shock hazards as a result of crisscrossing multiple feeders or branch circuits that are supplied from multiple metered supplies.

Policy 25: **NEC 250.52** – A concrete incased electrode, as described per section 250.52(A)(3) of the 2005 NEC, may serve as a building or structure main grounding electrode and shall be supplemented by an additional electrode per NEC 250.52(A)(5) or 250.52(A)(6).

Reason: This policy is established to recognize a concrete encased electrode as the primary grounding electrode for buildings or structures; the NEC is not specific in this regard. Based on our environmental conditions a concrete encased electrode lends to creating a more effective grounding electrode.

Policy 26: **NEC 250.66** – Service grounding electrode conductors of a grounded or ungrounded ac system not be less than given in Table 250.66 of the NEC, except as permitted in 250.66(C).

Reason: This policy is a long standing policy which has proven effective. Without such policy we believe that grounding electrode conductor may not be adequate in some instances (i.e. larger electrical services).

Policy 27: **NEC 110.26** – Dedicated equipment space, as defined by the NEC, includes the space extending 6 inches beyond the width and depth of the equipment.

Reason: This policy is established as the NEC permits foreign systems (i.e. water pipes, A/c ducts) that are likely to leak or condensate within 1/16 inch of electrical panels, which we believe is insufficient to protect electrical equipment from minor leaks that could cause a hazardous environment.

Policy 28: **NEC 230.70** – Service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside within 10 feet of the point of entrance of the service conductors.

Note: See NEC 230.6 for conductors that are considered to be outside of a building

Reason: This policy is established to limit the length of unprotected service entrance conductors within a structure or building. The NEC is ambiguous in this regard.

Policy 29: **NEC 422** – drinking fountains to be protected with a ground fault circuit interrupter (GFCI) device as defined by the NEC.

Reason: This policy is established as a result of persons experiencing mild electrical shocks while attempting to drink water from faulty drinking fountains.

Policy 30: **NEC 680.50 & 682** – All electrical wiring or equipment associated with fountains, natural or artificially made bodies of water shall be GFCI protected.

Reason: This policy established as a result of an increasing number of fountains, natural and artificially made bodies of water having provisions for electrical equipment without GFCI protection. Additionally, this policy will reduce potential shock hazards that are increased by the presence of high voltage.

Policy 31: **NEC 230.28** – except for temporary supplies, where an overhead service mast is used for the support of service-drop conductors, it shall be a minimum size of 2 inch rigid metallic conduit (RMC).

Reason: This policy is established in support of the electric utility company to ensure that service mast has adequate strength to independently support the utilities service drop conductors.

Policy 32: **NEC 210.52 (b)** – An independent 15 or 20 amp branch circuit shall be provided for refrigerator(s) within dwelling units.

Reason: This policy is established to prohibit refrigerators from being supplied by the small appliance circuit as allowed by the NEC. This is essential as refrigerators commonly draw high currents which limit the available capacity of the kitchen counter small appliance branch circuits.

Policy 33: **NEC 702** – For permanent installed generators, the occupant of a single family dwelling or a duplex can manually select option standby loads by individually turning on or off circuit breakers in an electrical panel. Provided, the generator feeder(s) is controlled by a manual transfer switch and a "CAUTION" plaque is posted at the transfer equipment with wording as noted by the electrical inspectorate.

Such wording may include but is not be limited to: "CAUTION - The generator is rated at ___ amps and is not adequate to supply all household loads. Turn off some of the nonessential loads (i.e. A/C units) by switching off the A/C breakers in the electrical panel. Failure to turn off non-essential loads may result in the generator being overloaded and shutting down."

Generators installed under this policy must be sized at least 20 percent of the service if it is rated 200 amp or greater and 25 percent for service rated less than 200 amps.

Policy 34: **NEC 220.61** – Unless a reduction is prohibited by the NEC, grounded (Neutral) conductors shall not be reduced to less than two (2) sizes smaller than the systems ungrounded (hot) conductors.

Reason: This is a long standing policy that is intended to prevent burnout as a result of undersized grounded conductors. Today this is of significance as most lighting and equipment within homes and workplace contain a large amount of nonlinear loads, which causes higher loads on grounded (neutral) conductors.

Policy 35: **NEC 220.87** – the load recording time is reduced to 15 days instead of the 30 days as required by section 220.83 of the NEC, unless deemed necessary by the electrical inspectorate.

Reason: This policy is established to reduce the amount of days required by the NEC as we believe the 30 days gives consideration to local conditions within the US.

Policy 36: **Subdivisions** – Electrical drawings shall be submitted to the office of the BCU for approval by the electrical inspectorate prior to the installation of underground electrical raceways in subdivisions.

Reason: Although underground electrical conduits require inspection to ensure compliance with the NEC, they are generally overlooked for subdivisions seeing that subdivisions do not require a building permit once approved by the central planning authority (CPA).

Policy 37: **Smoke Alarms** – Except where a central fire alarm system is required under the CIBC, all smoke detectors within dwelling units shall be supplied by to one of the general lighting branch circuits. Smoke detectors shall be located as directed by section 905.2 of the CIBC.

Reason: This policy is established as smoke alarms prior to this policy were permitted on a separate branch circuit, which led to occupants of a dwelling turning of the breaker when the battery became low and a nuisance “ chirping ” occurred.

Policy 38: **SPC 412** – A code compliant floor drain shall be provided for all public restrooms.

Reason: To prevent flooding in restroom

Policy 39: **PSDC 406** - Septic tank and wastewater treatment plants’ effluent disposal well shall be a minimum of 4” diameter and sleeved to a minimum depth of 40 feet. The septic tank’s outlet shall be at least 18 inches above the ground water.

Reason: To prevent backflow of ground water into tanks.

Policy 40: **SPC 107.3** – Permanent water supply to building shall be in places prior to a final plumbing inspection being approved.

Reason: Final inspection shall be made after the building is complete, all plumbing fixtures are in place and properly connected, and the structure is ready for occupancy.

Policy 41: **SPC 602** – Where public water is not available, the water supply shall be tested in accordance with section 602 of the 1997 Standard plumbing code.

Reason: Only potable water shall be supplied to plumbing fixtures that provide water for drinking, bathing or culinary purposes, or for the processing of food, medical or pharmaceutical products. Unless otherwise provided in this code, potable water shall be supplied to all plumbing fixtures.

Dependent on geological and soil conditions and the amount of rainfall, individual water supplies are of the following types: drilled well, driven well, dug well, bored well, spring, stream or cistern. Surface bodies of water and land cisterns shall not be sources of individual water supply unless properly treated by approved means to prevent contamination.

Water from an individual water supply shall be approved as potable by the authority having jurisdiction prior to connection to the plumbing system.

**Emerson Piercy,
Chief Building Control Officer**