

Post Irma Interim Reconstruction Policy

September 2017

Introduction

Hurricane Irma, an extremely powerful category 5 hurricane, directly impacted the British Virgin Islands on September 6, 2017. The damage sustained was catastrophic. Most of the damage to infrastructure was observed in buildings comprised of wood construction and steel-clad construction. It is recognised that damaged homes and businesses need to be reconstructed and the territory to get back to a place of normalcy as soon as possible. However, that need must be balanced with the need for the reconstructed homes and businesses to be built in such a way that they would withstand another major hurricane. As a result, this policy has been formulated to address:

1. The procedure for processing applications for reconstruction
2. Guidance notes for reconstruction including construction details
3. Proposed laws that will be passed in short order to reduce the potential damage to infrastructure from of future category 5 hurricanes

The procedure for processing applications for reconstruction

Applications that were submitted prior to Hurricane Irma (HI5+) will be reviewed on a fast-track basis to help advance the economy as well as to get them processed in a timely manner to allow time for an influx of reconstruction applications.

Planning Authority:

Many of the building repairs required due to the impact of HI5+ will fit under the broad category of “renovation” and as such will NOT require approval from the Planning Authority. This includes those structures where roof repairs are necessary. Furthermore, persons wishing to change from wooden to concrete roof structures will NOT require Planning Approval.

Applications will be categorized as follows:

1. Buildings that have valid approval (ie still with the 3 year period granted with approvals or extensions). These persons may proceed to build in accordance with their approval with no further action necessary from the Planning Authority;
2. Buildings that have been approved but the approval has lapsed. These applications will be granted extensions with no application fees required. Owners will be required to simply write to the Planning Authority requesting an extension.
3. Buildings which have no recent approval and require full approval for reconstruction will be required to submit an application for Planning Approval.

As is the usual practice, applications that do not require Planning Authority approval are required to seek approval from the Building Authority.

Building Authority:

Post HI5+ applications will be grouped into two categories: new applications and reconstruction applications. New applications will continue to be resolved monthly whereas reconstruction

applications shall be resolved on a weekly basis. The following additional considerations will be given:

- Concrete roof designs will be fast-tracked, pending the existence or inclusion of 8" structure (not 6") below roof.
- Wooden roofs with separation of main roof and porch roof shall be fast-tracked.
- Roof slope on wooden roof shall be 3:12 pitch minimum, 6 or 7:12 preferred.
- Promote the use of sketches

Guidance notes for reconstruction including construction details

Roof construction is of particular importance given the many failures experienced as a result of HI5+. As property owners make plans to repair and rebuild some basic steps must be followed.

1. Rafters must be 3" by minimum. No 2" rafters would be allowed;
2. Rafters must be securely fastened to beams and wall plates; hurricane clips and rebar connections must be used (see illustrated details)
3. Plywood decking must be lapped and secured using 2.5" (minimum) fasteners;
4. Purlins must be secured using 4.5" (minimum) fasteners. 2 per rafter minimum these must also be spaced in accordance with manufacturers specifications for the roof finish;
5. Roof finish must be secured according to manufacturer specification. Additional fasteners must be used at eaves, hips and valleys.

Doors and windows should be secured with shutters. Additional research will be needed to determine if openings of certain sizes can be recommended and possible limitation of various shutter styles.

Shutters must be carefully installed using manufacturer specifications. Attention must be paid to the width of the opening being secure in order to select appropriate shutter style for various openings.

Proposed laws that will be passed in short order to reduce the potential damage to infrastructure from of future category 5 hurricanes

Legislation

Building Code

The 1999 building code is due for an update and we have already started the process of updating it prior to Irma. However, if we only change the building code alone we will only see marginal improvements in the infrastructure. A building code update by itself cannot do much to change the understanding of the code nor improve substandard construction practices that exist. We must go a few steps further if the goal is to improve the construction industry so that our buildings and our

infrastructure are more resilient to hurricanes as catastrophic as Hurricane Irma. Together with changing the building code we will pass legislation to register professional architects and engineers as they are the only ones that can properly interpret a building code. We will also pass contractor legislation whereby contractors can be registered according to the different classes or categories that match their capacity or capability. The contractor legislation will also require training so that construction professionals can constantly improve their skills and capabilities.

Architects and Engineers

Contractor

Planning Guidelines

Fire Code

Other

Long-term the development approval process needs to be revamped. Presently there are two separate approval processes with many loop holes which are exploited far too often. By reconfiguring the process to a one-stop-shop Government will have much greater influence on the regulation of the construction industry .