

Appendix H.
Easy Guide Checklist for Progressively Retrofitting Modest Homes

EASY-GUIDE CHECKLIST

**PROGRESSIVELY UPGRADING FOR HURRICANE RESISTANCE HOMES OF
LOWER INCOME FAMILIES OF THE EASTERN CARIBBEAN**

Premises:

- 1) The families owning these properties have a modest income, desire to do home improvements and will need to be guided as to the value and importance of including hurricane resistance measures in their home improvements plans.
- 2) Any hurricane resistance measures included will need to be folded in under larger home improvements the family desires.
- 3) Families may have to do both their home improvements and hurricane resistance retrofitting in progressive stages, for they may not have enough funds to complete the entire project at one time.

Priorities:

When a complete retrofitting project cannot be financed then the priorities come in this order:

- 1) Strengthening and tying down the roof as much as possible since heavy rains and winds are perennial. If the roof fails, whether in hurricane or regular storms, all the other home improvements will be damaged and possibly wasted.
 - replace any rotten roofing sheets and/or rafters
 - adding extra nails with dome heads in corrugated sheeting
 - eliminate overhang in excess of 18" (horizontal distance) enclosed or 8" unenclosed.
 - insert extra lath/purlins and nail sheeting to the laths
 - metal strap roof rafters to wall plate and ridge beam
 - place collar ties on every second set of rafters
- 2) Establishing a firm footing/foundation and tying the house to this solid foundation. If a house shifts off of its footings during a storm there will be great water leakage and damage to other home improvements.
 - embed four or more concrete/wood pillars to strengthen footing
 - bolt/strap floor sill to new and old footings/foundations

- 3) Strengthening the walls at the corners, around doors and windows and where they are attached to floor sill and wall plate.
 - metal strap wall studs to floor sill and wall plate
 - double studs around doors and windows and cross braces in corners
 - add extra studs if currently located wider than 2 feet.
- 4) Strengthen doors and windows to withstand winds/construct shutters.
 - teach family how to completely close and/or leave open opposite entrances to neutralize air pressure in hurricane force winds.
 - construct prefit nail-on shutters
- 5) Remainder of minimum standards checklist and/or additional amounts of each of the above (i.e. six footing pillars instead of four; more metal straps; additional studs etc.)
- 6) Other hazards — think of flooding, landslides, etc. when selecting or evaluating a site.

N.B.

All of the above skills can be taught to any family member that has a working knowledge of hammer, saw, measuring tape and nails. Therefore, a family with severely limited resources can save cost by doing much of the work themselves under the watchful eye of a technical supervisor.

Each of these steps can be done progressively as and when the family has the funds to buy the supplies. A family may choose to repair and strengthen the roof in the first year, then construct a new kitchen (with some hurricane resistance included) in the second year. In subsequent years they can do the footings, the wall strengthening. Each step will make the house stronger and more hurricane resistance. The risk is that a strong hurricane will hit midway in the project and destroy the repairs made before the entire house is fully strengthened.