

## **SHELTER SECTOR RESPONSE MONITORING**

**TYPHOON HAIYAN, PHILIPPINES, 2013**

**Final Report: Monitoring Assessment 2**

**SEPTEMBER 2014**



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REACH is an interagency program of IMPACT Initiatives, ACTED and UNOSAT. Since 2011 REACH has formalized a partnership with the Global Shelter Cluster (GSC) to support the strengthening of its coordination and planning capacity. Dedicated REACH teams (including assessment, database and mapping experts) are available to be rapidly deployed to the field in the emergencies in order to facilitate interagency assessments and mapping activities on behalf of the shelter cluster. Resulting information products are used to enable better planning and coordination by the cluster, and are widely disseminated. For more information, see: [www.reach-initiative.org](http://www.reach-initiative.org). You can write to us directly at [geneva@reach-initiative.org](mailto:geneva@reach-initiative.org) and follow us @REACH-info.

## Acronyms and Abbreviations

<b>3Ws</b>	Who, What, Where (matrix summarising which actors is undertaking what type of interventions in each geographical area affected by the emergency and targeted for the relief response)
<b>4Ps</b>	Pantawid Pamilyang Pilipino Progra
<b>DAFAC</b>	Disaster Assistance Family Access Card
<b>DRR</b>	Disaster Risk Reduction
<b>DSWD</b>	Department for Social Welfare and Development
<b>GSC</b>	Global Shelter Cluster
<b>HLP</b>	Housing Land and Property Rights
<b>IFRC</b>	International Federation of Red Cross and Red Crescent Societies
<b>IDMC</b>	Internal Displacement Monitoring Centre
<b>IOM</b>	International Organisation for Migration
<b>LGU</b>	Local Government Unit
<b>NSCB</b>	National Statistical Coordination Board
<b>ODK</b>	Open Data Kit
<b>PAR</b>	Philippines Area of Responsibility
<b>PARR</b>	Presidential Assistant for Recovery and Rehabilitation
<b>PRC</b>	Philippines Red Cross
<b>PMR</b>	Periodic Monitoring Report
<b>SRP</b>	Strategic Response Plan
<b>WASH</b>	Water, Sanitation and Hygiene
<b>YRRP</b>	Yolanda Rehabilitation and Recovery Plan

## Geographic Classifications

<b>Region</b>	Highest form of governance below the national level
<b>Province</b>	Second highest form of governance comprised of multiple municipalities
<b>Municipality</b>	A collection of barangays that comprise a broader 'city'
<b>Barangay</b>	An area formed of 10,000 voters; the lowest administrative boundary
<b>Sitio / Purok</b>	Neighbourhood or area that is informal and not classified for administrative purposes

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## SUMMARY

At 10:00 on 6 November 2013, Typhoon Haiyan (named Yolanda locally) entered the Philippines Area of Responsibility (PAR). The Typhoon intensified as it entered the Eastern Visayas region, first making landfall over Guiuan, Eastern Samar province, on 8 November, at 04:40. By 08:00 on 8 November the typhoon had made landfall six times across the Central Philippines and continued to weaken over the West Philippine Sea. Typhoon Yolanda left the PAR on 9 November at 15:30.

This assessment was conducted as a follow-up monitoring exercise to the initial shelter and WASH needs assessment conducted in December 2013 and the first shelter and WASH response monitoring assessment in March 2014. The purpose was to understand remaining needs of the affected population, the differing needs of vulnerable groups and outcomes of the shelter sector response. There was a strong focus on assessing the extent to which households were living in safe and adequate dwellings based on shelter recovery guidelines developed by the cluster. This information is critical for the humanitarian community and more specifically, the shelter sector, to understand gaps in current assistance, progress in reference to the Strategic Response Plan (SRP) and the extent to which the affected population is ready to move into the recovery phase.

The assessment was conducted by REACH as part of its partnership with the Global Shelter Cluster. In the Philippines, the shelter cluster is led by the Department of Social Welfare and Development (DSWD) and supported by the International Federation of the Red Cross and Red Crescent Societies (IFRC) in natural disasters and the International Organisation for Migration (IOM) in conflict as cluster co-leads.

The results of the second response monitoring assessment show that shelter recovery seems to have slowed and that households have grown increasingly frustrated with the stagnation of assistance as longer-term assistance needs are not being met. As the previous monitoring assessment report described, initial emergency shelter assistance seems to have been successful in meeting immediate needs, but as additional assistance seems to have flowed to some of the same households, the scope of the recovery has been limited. As housing recovery needs become more long-term, households feel that they increasingly lack the resources necessary to complete their housing recovery process. Furthermore, the outcome of the shelter assistance that has reached households has not led to minimum levels of safety for much of the population, although much has been deemed adequate or fairly adequate<sup>1</sup>. As households continue to feel that their capacity to self-recover is limited and increasingly diminishing amounts of assistance continues to flow to the same locations at the possible expense of other locations more in need, the humanitarian community runs the risk of the recovery process across the entire affected area remaining stagnated.

These results can directly inform a Periodic Monitoring Report (PMR) of the Strategic Response Plan (SRP) by providing actors with clear gaps in recovery assistance and priority geographic areas on which to focus. Having met the SRP objectives for emergency shelter provision, the sector has the opportunity to shift focus to achieve the recovery objectives in the same plan.

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<sup>1</sup> It should be noted that this assessment assessed structural safety features which cannot be applied relatively to an emergency shelter.

## INTRODUCTION

At 10:00 on 6 November 2013, Typhoon Haiyan (named Yolanda locally) entered the Philippines Area of Responsibility (PAR). The Typhoon intensified as it entered the Eastern Visayas region, first making landfall over Guiuan, Eastern Samar province, on 8 November, at 04:40. By 08:00 on 8 November the typhoon had made landfall six times across the Central Philippines and continued to weaken over the West Philippine Sea. Typhoon Yolanda left the PAR on 9 November at 15:30.

A total of 9,073,804 individuals, across 9,303 barangays, in 536 municipalities across the Central Philippines were identified by the Government of the Philippines as having been affected by Typhoon Yolanda. Of the affected population, a total of 1,910,547 individuals were displaced by Yolanda; with 422,290 people displaced to formal evacuation centres, and 1,488,257 to other locations. According to a July 2014 report from IOM, 23,768 displaced people are still living in temporary or transitional collective displacement sites. DSWD reported a total of 1,012,790 damaged houses in the affected area; 518,878 totally destroyed and 493,912 partially destroyed as of 5 March.

The overall objective of this assessment was to monitor the shelter sector response to Typhoon Haiyan. Specifically, the assessment aimed at understanding remaining needs of the affected population, the differing needs of vulnerable groups and outcomes of the shelter sector response. There was a strong focus on assessing the extent to which households were living in safe and adequate dwellings based on shelter recover guidelines developed by the cluster. This information is critical for the humanitarian community and more specifically, the shelter sector, to understand gaps in current assistance, progress in reference to the Strategic Response Plan (SRP) and the extent to which the affected population is ready to move into the recovery phase.

The assessment was conducted by REACH as part of its partnership with the Global Shelter Cluster. In the Philippines, the shelter cluster is led by the Department of Social Welfare and Development (DSWD) and supported by the International Federation of the Red Cross and Red Crescent Societies (IFRC) and the International Organisation for Migration (IOM) as cluster leads (in natural disasters and conflict, respectively). Shelter Cluster partners, IOM and Habitat for Humanity participated in data collection and management of enumerators in the field.

The assessment report is organised into clear sections intended to guide the reader through the most important information. The key sections include: (1) methodology; (2) information on vulnerability and relocation potential; (3) shelter sector findings; (4) conclusions; and (5) recommendations.

## METHODOLOGY

This section describes the methodology that was developed and implemented for the shelter sector response monitoring assessment. The assessment methodology below outlines (a) the multi-stage sampling strategy designed and used for the assessment, including final sample size by municipality; (b) the data collection process, including an overview of data collection methods and tools; and (c) the representativeness and limitations of the data collected.

### **MULTI-STAGE SAMPLING STRATEGY**

This assessment focused on the priority areas located within 50km from the storm path. Provinces with municipalities within this proximity range were chosen and municipalities within each targeted province were then selected based on specific classifications outlined below. Households were then randomly assessed within each municipality. In order to give a complete picture of the current response context in the affected regions in the aftermath of Typhoon Haiyan, REACH utilised a multi-stage cluster sampling methodology, which is briefly outlined below.

This sampling methodology was chosen in order to avoid sampling bias and to provide the Shelter Cluster, and other humanitarian actors responding to the crisis, with a complete and representative picture of the situation in the priority response areas. A number of secondary sources, including government reports, cluster Who, What, Where matrices (3Ws) and the results of the initial Shelter and WASH Cluster assessment and the first Shelter and WASH sector response monitoring assessment<sup>2</sup> were used to better understand the current situation in the affected areas in relation to the period immediately after the typhoon and the reported response trends. This data along with the requirements of the Shelter Cluster and the priorities of the government through the Yolanda Rehabilitation and Recovery Plan (YRRP) informed the sample for assessment.

### **SELECTION OF PROVINCES FOR ASSESSMENT**

Provinces were selected based on their proximity to the storm path according to the priority range set forth by the government. Only those provinces with municipalities within 50km of the storm path were eligible for selection for the assessment. All results are representative to the provincial level.

### **SELECTION OF MUNICIPALITIES WITHIN PROVINCES**

Four municipalities per province were selected ensuring equal representation across the sample based on the following classifications: coastal, inland, and north/south of the storm track.

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<sup>2</sup> The sample for the initial assessment included households within 100 kilometres of the storm path. The sample for the further two monitoring assessments included households in the government priority zone of 50 kilometres from the storm path. Any comparisons between the three are done for households within the 50 kilometre zone.



Map 1: Municipalities targeted by the Shelter Cluster Response Monitoring Assessment



## SELECTION OF BARANGAYS WITHIN MUNICIPALITIES

Five barangays per municipality were randomly selected, weighted based on population size and selected for assessment. Barangays were categorised into high, medium, and low population cohorts. Barangays in the high category were three times more likely to be selected during the random sample than those categorised as low population to ensure proportional population representation within the sample. Urban and rural classifications were assigned to each barangay allowing for analysis within these categories with the sample somewhat biased toward rural barangays, due to more barangays being rural.

## SELECTION OF HOUSEHOLDS WITHIN BARANGAYS

In each of the targeted barangays, enumerators randomly selected households for assessment. Households were assessed in each barangay until the target sample size for the municipality had been reached. Households were selected by enumerators through a randomised field walk, assessing one household out of every three in the geographical location they were assigned. The target number for this assessment was 4100 households, based on a maximum sample of 400 households in each province.

Based on an assumption that approximately 20 per cent of households may not be present at the time of assessment due to displacement or daily activities away from the house, field teams were instructed to oversample from each barangay, if necessary, to ensure that a representative sample size of present households was reached at the provincial level. This proved to be unnecessary, as only 269 shelters assessed across the sample contained no household members.

Table 1 below provides a list of the 10 provinces selected for assessment and the representative sample size. All locations, except San Remigio (Antique province) and Langub barangay (Santa Fe municipality)<sup>3</sup>, that were initially targeted for assessment were assessed.

<sup>3</sup> These locations were not assessed due to weather and accessibility issues as a result of Typhoon Glenda at the time of the assessment.

Table 1: Sampled locations (target municipality, target sample size, assessed households)

Province	Municipality	Target sample size	Assessed Households
Eastern Samar	Lawaan	100	110
	Hernani	100	105
	Llorente	100	101
	Guiuan	100	102
Samar	Basey	134	151
	Santa Rita	134	147
	Marabut	132	122
Leyte	Jaro	100	102
	Palompon	100	105
	Babtngon	100	108
	Inopacan	100	102
	Tacloban	100	104
Cebu	Santa Fe	100	80
	Daanbantayan	100	98
	San Remigio	100	101
	Pilar	100	97
Iloilo	Sara	100	113
	Santa Barbara	100	91
	San Dionisio	100	99
	Barotac Nuevo	100	84
Capiz	Sigma	100	106
	Jamindan	100	108
	Sapi-An	100	105
	President Roxas	100	103
Aklan	Libacao	100	102
	Malinao	100	102
	Buruanga	100	83
	Kalibo (Capital)	100	102
Antique	Sebaste	100	91
	Pandan	100	137
	Patnongon	100	186
<b>Total</b>		<b>3300</b>	<b>4127<sup>4</sup></b>

### DATA REPRESENTATIVENESS, EXTRAPOLATION AND LIMITATIONS

The combination of stratified, cluster, and random sampling methods ensures equal representation of relevant categories of administrative units and households while avoiding sampling bias at each level. Thus, the dataset provides the Shelter Cluster and other humanitarian actors responding to the crisis with a complete and representative picture of response trends. The methodology used in this assessment is representative at the provincial level within the 50 kilometre storm path with a 95% confidence interval and 5% margin of error.

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<sup>4</sup> 3858 households present for interview

The methodology was designed for the extrapolation of findings at the provincial level along with specific categories (e.g. urban/rural, north/south of storm track, coastal/inland) across the priority area of 50 kilometres from the storm path. Therefore, findings for the households in a given category can be considered indicative of the situation in households that are also members of that category within 50 kilometres of the storm path.

Due to weather and accessibility issues during the time of the assessment as a result of Typhoon Glenda, the municipality of San Remegio in Antique province and the barangay of Langub in Santa Fe municipality, Cebu province, were not assessed. Despite this, a fully representative sample was achieved for every province except Biliran in which 94% of the required sample for present households was achieved and Cebu in which 64% of the required sample for present households was achieved. This presents a limitation in the ability to provide a fully representative sample for the areas of Cebu province within 50 kilometres of the storm path. While every effort will be made to minimize this limitation, the results for Cebu province should be viewed accordingly.

## ***GEOGRAPHIC INFORMATION SYSTEMS AND MAPPING***

Maps were critical in training the enumerators and conducting the field assessments. Each team was given a set of maps for the targeted municipality for each day's data collection with target areas and sample sizes highlighted as guidance.

## ***MIXED-METHOD DATA COLLECTION***

The shelter response monitoring assessment included three components of data collection and analysis: (a) review of secondary data made available by national and regional government bodies and humanitarian agencies; (b) household level assessments; (c) Geographic Information Systems (GIS) and mapping of selected collected and analysed data.

## ***SECONDARY DATA REVIEW***

The assessment team reviewed data on the impact of the typhoon made available by DSWD, NDRRMC and a range of other national and international sources. Additionally, the initial Shelter and WASH rapid assessment, the first Shelter and WASH response monitoring assessment, and cluster 3Ws were used. These secondary sources were used to inform analysis of the response and the design of the data collection tools presented below. The secondary data was also used during the data analysis phase to triangulate and contextualize data collected by enumerators in the field.

## ***HOUSEHOLD ASSESSMENTS***

The primary method of data collection was a representative random sample of individual households. The assessment tool, designed by REACH in close collaboration with the Global Shelter Cluster and field teams, was built to contain a combination of enumerator observations (particularly regarding shelter damage in order to ensure standardisation of categorisations) and responses from the households themselves. In cases where the household was not present at the time of the assessment, the household's shelter itself was assessed based only on enumerator observations regarding the extent of the damage sustained.

The household assessment tool was designed primarily to collect detailed shelter data to compare to initial findings, assistance trends and vulnerable populations. Core indicators were integrated following consultation with the Shelter Cluster

Household assessments were conducted using an assessment tool built on the Android smartphone based Open Data Kit (ODK) platform, which significantly improves data quality as a result of: (a) reducing human error as a result of loss of forms, data collection mistakes, and data entry mistakes thus improving the accuracy of collected data; (b) increasing the speed at which mapping products and analytical reports can be produced through reducing data cleaning time and removing the time for data entry; and (c) ensuring the protection of data as a result of completed forms being removed from the data collection tool upon upload to the centralised database.

Data collected by enumerators was subsequently validated by the team leader before being uploaded to the central database, after which a final data quality check was conducted by the GIS/Database Manager.

## **CATEGORISATION AND CLASSIFICATION**

### **HOUSING DAMAGE CATEGORIES**

This assessment uses the Shelter Cluster's definition and categorization of shelter damage, which is compatible with and can be compared to the categories used by government agencies in the Philippines. This report provides the measurement for each damage category and compares it to the initial needs assessment and first monitoring assessment values while also using the damage categories as an analytical disaggregation.

**Table 2: Housing damage category according to the Shelter Cluster and the Government**

<b>Damage category (Shelter Cluster)</b>	<b>Damage category (Government)</b>
<b>No Damage</b>	<b>No Damage</b>
<b>Minor Damage</b>	<b>Partially Damaged</b>
<b>Major Damage</b>	
<b>Collapsed or totally damaged</b>	<b>Totally Damaged</b>

### **SAFETY AND ADEQUACY SCALES**

To determine recovery, it is important not only to look at the quantity of houses that have been repaired or reconstructed, but also at the quality and safety of these efforts. To measure outcomes of the shelter sector response, the assessment analysed data on the classification of main features of the dwellings in which assisted households lived, using the Shelter Cluster's shelter recovery guidelines<sup>5</sup> as a framework. Key safety and adequacy features as agreed by Shelter Cluster partners in the shelter recover guidelines were used as the basis for assessing the safety and adequacy of each household. These guidelines serve as a minimum standard for safety and adequacy of dwellings.

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<sup>5</sup>[https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/Recovery%20Shelter%20Guidelines%20DRAFT\\_140524\\_SAG%20Approved.pdf](https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/Recovery%20Shelter%20Guidelines%20DRAFT_140524_SAG%20Approved.pdf)

The following minimum safety features were assessed: (1) site, (2) shape, (3) foundation, (4) tie-down, (5) bracing, (6) strong joints and (7) roofing. Each of these features were rated as “none”, “poor”, “okay” or “good” by enumerators. A scale was developed to provide a classification for each dwelling to measure how resistant to future disasters the dwelling is:

- Safe dwelling = all specifications good or okay
- Fairly safe dwelling = 1 to 3 specifications were poor or were not present
- Fairly unsafe dwelling = 4 to 6 specifications were poor or were not present
- Very unsafe dwelling = all 7 specifications were poor or were not present

The following minimum adequacy features were assessed: (1) space, (2) durability, (3) drainage, (4) ventilation, (5) ceiling height, (6) privacy, (7) security and (8) accessibility. Each of these features were rated as “present” or “not present” by enumerators. The following scale was used to provide a classification for each dwelling:

- Adequate = all specifications present or over the required specification
- Fairly adequate = 1 to 3 specifications were not present (score 1 to 3)
- Inadequate = 4 to 7 specifications were not present (score 4 to 7)
- Totally inadequate = all specifications were not present or were less than the required specification (score 8)

## VULNERABILITY AND RELOCATION

### Sex and Age Disaggregated Household Data

Field assessment teams assessed a total number of 4127 houses (3858 of which had household members present) across the ten targeted municipalities. The average household size was 5.1 individuals, a marked decrease from the average assessed during the first assessment of 6.4 individuals, but largely the same as the second assessment that found an average household size of 5.2.

According to the 2010 census figures on population and housing<sup>6</sup>, the average household size in the Philippines is 4.6 individuals, slightly lower than the average from this assessment. The average of the regions assessed in this assessment (Regions VI, VII and VIII) is also about 4.6 individuals, suggesting that there are more individuals per household as a result of the typhoon. This is likely due to some families continuing to live together in a hosting situation while housing reconstruction is ongoing, while the decrease seen between the initial assessment and the two monitoring assessments suggests that the initial influx of families into hosting situations has lessened.

The sex breakdown remained the same as the first and second assessments at 51% male and 49% female. This is generally in line with the 2010 census figures for the regions assessed<sup>7</sup>. The combined cohorts for individuals under 19 years old bring the proportion of children to 46% of the assessed population, nearly the same as the pre-typhoon census figures of 45% for these three regions.

### VULNERABILITY

The Shelter Cluster in the Philippines has identified categories of households<sup>8</sup> particularly vulnerable during emergencies that should be prioritised in the shelter sector response as they may face particular difficulties accessing relief and recovery assistance, notably when rebuilding their homes. These categories include:

1. **Pre-existing vulnerabilities:** poor households with persons with reduced mobility, pregnant and lactating women, women/single/children/older persons/heads of large households, households with person/child with disability family members, indigenous persons, etc. This also includes people with new or exacerbated hardship due to the impact of the typhoon.
2. **Level of destruction:** poor households living in an unsafe structure or an uninhabitable house due to impact of the typhoon.
3. **Land and property tenure:** households that have lost legal title or those who never had it.
4. **Recovery capacity:** poor households with low self-recovery capacity (including loss of livelihoods), and those that compared to the community situation haven't been able to rebuild a safe shelter.
5. **Relocation:** households at risk of relocation due to 'no-dwelling' zoning.
6. **Access to shelter materials:** households in areas with low access to materials.
7. **Displacement:** poor households that are displaced and settled informally.
8. **Host families** who are supporting other families, but have limited means.

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<sup>6</sup>[http://www.census.gov.ph/sites/default/files/attachments/hsd/pressrelease/Table%201%20Household%20Population%2C%20Number%20of%20Households%2C%20and%20Average%20Household%20Size%20by%20Region%2C%20Province%2C%20and%20Highly%20Urbanized%20City%2C%20Philippines%2C%202010\\_0.pdf](http://www.census.gov.ph/sites/default/files/attachments/hsd/pressrelease/Table%201%20Household%20Population%2C%20Number%20of%20Households%2C%20and%20Average%20Household%20Size%20by%20Region%2C%20Province%2C%20and%20Highly%20Urbanized%20City%2C%20Philippines%2C%202010_0.pdf)

<sup>7</sup> <http://www.census.gov.ph/content/age-and-sex-structure-philippine-population-facts-2010-census>

<sup>8</sup> <https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Pages/Beneficiary-Selection.aspx>

The Shelter Cluster recommends the application of these categories of vulnerable households in all its strategies for responding to disasters in the Philippines with the aim to encourage agencies to prioritise the needs of the most vulnerable members of society ensuring equitable, safe and dignified access to assistance, and to provide specialist support, as required.

The following categories of vulnerable households have been used in order to understand vulnerabilities that may have limited household access to assistance thus far and that will require additional efforts and prioritisation. The values for the initial assessment, the first response monitoring assessment and the current are presented in order to provide information throughout the response period.

### PHYSICAL VULNERABILITY

Physical vulnerability and displacement analysis includes households falling within the following categories: (a) living in a purported no-build zone, (b) households currently displaced, (c) households hosting other individuals on their property, and (d) households with formal and informal tenure.

Table 3: Physical Vulnerabilities, Initial Assessment and Monitoring

Vulnerability <sup>i</sup>	Response Monitoring Assessment 1	Response Monitoring Assessment 2
Living in a purported no-build zone <sup>9</sup>	11%	21%
Currently displaced	9%	6%
Hosting other individuals	7%	6%
Formal Tenure <sup>10</sup>	61%	54%
Informal Tenure <sup>11</sup>	35%	45%

<sup>i</sup> as reported by households

Overall, the assessment found that **94% of households are living inside a dwelling on the land they lived on previously and are not currently displaced**. This figure is slightly higher than the initial needs assessment and monitoring figures<sup>12</sup> and may suggest that an additional 3% of households initially displaced have returned to their previous location since the last monitoring assessment. As for hosting, the overall proportion of 6% of households hosting other families in their house or on their property is nearly the same as the initial needs assessment and first monitoring assessment.

<sup>9</sup> While national Government policy has used several terms, including Build Zones, No Dwelling Zones and Safe, Unsafe and Controlled Zones, the term "No build zone" was used here as it remains the most commonly used.

<sup>10</sup> Formal tenure: own house and lot, own house and rent lot, rent house/room including lot; these are taken from DSWD's DAFAC categorization on tenure type

<sup>11</sup> Informal tenure: own house with rent free lot with the consent of the owner, own house with rent free lot without the consent of the owner, rent free house and lot with the consent of the owner, rent free house and lot without the consent of the owner; these are taken from DSWD's DAFAC categorization on tenure type. For the purposes of this assessment the difference between informal and formal tenure was taken on the basis of rent being paid or not as opposed to any form of evidentiary documentation.

<sup>12</sup> [https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/Haiyan%20Typhoon%20Shelter-WASH\\_assessment\\_Final%20Report\\_validated\\_formatted.pdf](https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/Haiyan%20Typhoon%20Shelter-WASH_assessment_Final%20Report_validated_formatted.pdf)

[https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/PHL\\_Haiyan\\_Shelter-WASH\\_Response\\_Monitoring\\_Assessment\\_Final\\_Report\\_FINAL\\_22Apr2014.pdf](https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/PHL_Haiyan_Shelter-WASH_Response_Monitoring_Assessment_Final_Report_FINAL_22Apr2014.pdf)



## No-Build Zones

The Philippines Government Presidential Assistant for Recovery & Rehabilitation (PARR) issued guidance on 15 March 2014, for Local Government Units (LGUs) stating that the originally proposed 40 metre coastal buffer as “no-build zones” would need to be changed in order to allow for livelihoods and commerce in coastal areas. The new guidance tasks LGUs with the role of determining “safe zones”, “unsafe zones” and “controlled zones” through the use of hazard risk mapping. Controlled areas may allow residential structures to be built above commercial entities and the structure to be built to a higher standard than those houses in safe zones.. The term “no-build zone” is used for this assessment, as many LGUs are yet to complete the land zoning process and “no-build zone” was still the most commonly used term at the time of the assessment.

Overall, the assessment found that 21% of households believe that they are currently living in no-build zones. This is fairly close to the government estimate of 205,128 households living in “unsafe zones” outlined in a July 2014 report from the Resettlement Cluster<sup>13</sup>. Assuming that the total population living in the 50km typhoon corridor is 1,053,302<sup>14</sup>, the assessment finds that 221,193 households believe that they live in purported “no-build zones”. The fact that these approximations are relatively close would suggest that dissemination of information by the LGUs and media to households regarding no-build zones and whether a household is expected to relocate has been generally successful. See Annex D for a detailed worksheet on population calculations.

Looking at the results across provinces, Eastern Samar, Samar, Leyte, Biliran and Negros Occidental show variability from the other provinces in many of the physical vulnerability and displacement categories. Specifically for households living in no-build zones, **households in these provinces are nearly three to four times more likely to report that they think they are living in a no-build zone** when compared to the other provinces. Iloilo, Aklan, Antique and Capiz, however, show relatively low proportions.

Table 4: Government Estimates of Households in Proposed NBZs Compared to Households Perceiving to Live in NBZs

Province	Government	Shelter Cluster Assessment	Difference (government-cluster)
Aklan	15,948 households	8,496 households	7,452 households
Antique	18,177	10,173	8,004
Biliran	8,905	33,046	(24, 141)
Capiz	12,036	6,896	5,140
Cebu	22,423	17,391	5,032
Eastern Samar	7,573	23,305	(15,732)
Iloilo	43,987	5,283	38,704
Leyte	30,632	30,455	177
Negros Occidental	27,055	41,390	(14,335)
Samar	8,900	29,044	(20,144)
<b>Total</b>	<b>195,636</b>	<b>205,478</b>	<b>(9,842)</b>
<b>Overall<sup>15</sup></b>	<b>205,128</b>	<b>221,193</b>	<b>(16,065)</b>

<sup>13</sup> This number is taken from the Government’s Comprehensive Rehabilitation and Recovery Plan, more specifically the Resettlement Cluster’s plan dated 31<sup>st</sup> July. Currently only available in hardcopy with a soft copy ‘highlighted’ version available at:

<http://president.gov.ph/wp-content/uploads/2014/08/Revised-DraftYolanda-Rehab-Briefer-as-of-1-Aug-2014-w-status-report.pdf>

<sup>14</sup> According to a DROMIC report from March 2014, 1,012,790 households were estimated to have been damaged or destroyed as a result of Typhoon Haiyan. Using the 96% damage figure from the initial Shelter Cluster assessment would then elicit a total population within the 50 kilometre storm path zone of 1,053,302.

<sup>15</sup> The overall figure includes all provinces in the 50 kilometre typhoon path zone, not only those provinces sampled as part of the monitoring assessment. The overall figure for the monitoring assessment is representative for the entire 50 kilometre zone.



Comparing the assessment results to the government estimates at the provincial level shows that, in fact, many more households in Biliran, Eastern Samar, Negros Occidental and Samar believe they live in “no-build zones” than the government estimates for these provinces. This could potentially be due to the fact that, while these provinces have some of the highest levels of typhoon-related damage, a household is considered by the government to be eligible for relocation whether or not they have damage, based on LGU-implemented hazard assessments. Thus, some households may consider themselves to be eligible for relocation and living in a “no-build zone” based on the damage levels around them as opposed to any objective hazard assessment or classification completed by the LGU. The fact that the majority of municipalities assessed in these provinces were classified as coastal could have also skewed these data toward higher numbers of households living in “no-build zones”.

## Tenure Arrangements

This shows a decrease from the first monitoring assessment, **54% of households report having formal tenure arrangements, whereas 45% report having informal tenure arrangements**<sup>16</sup>. The increase in households with informal tenure arrangements is likely due to families moving out of previously formal tenure situations into informal tenure situations as reconstruction continues and homes or sites are abandoned. This can be supported by the fact that the largest increase was amongst households that report they own their house but do not pay rent on the land on which they live however they have the consent of the owner – 40% of households reported this tenure arrangement as opposed to 28% from the first monitoring assessment. This is deemed to be an informal tenure arrangement and the major contributing factor to the decrease in formal tenure arrangements. 46% of households reported owning their house and plot with 7% owning their house, but renting their plot<sup>17</sup>.

**The results do not differ greatly across provinces, except for the case of Negros Occidental where households are two to three times more likely to own their house and live on their plot rent-free with the consent of the owner than the other provinces**<sup>18</sup>. Only 6% of households in Negros Occidental report owning their house and plot – an observation that is supported by the relatively high proportion of households reporting living in no-build zones in Negros Occidental discussed above.

In “no-build zones”, 56% of households report informal tenure arrangements compared to 43% in non-no-build zone areas. While unsurprising, this difference in tenure arrangement is likely due to more informal settlements being located in the “no-build zones”.

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<sup>16</sup> Whether formally recognised or not informal/customary tenure arrangements can at times enjoy more legitimacy in the eyes of local community members than statutory/formal arrangements. In some situations security of tenure based on informal or customary arrangements may be at least as secure as formally recognised tenure arrangements. For the purposes of this assessment only different tenure types were assessed, not the degree of security that the holder felt from a possible eviction (security of tenure)

<sup>17</sup> Proof of documentation was not required and therefore this ownership statistic could contain data for both statutory and customary ownership. Customary ownership can be seen in ways of occupying land through the development of customs, rules or practices in a specific community. In the Philippines owing to a lengthy and expensive land registration system a dynamic informal market exists represented in many different forms of informal arrangements.

<sup>18</sup> It is worth noting that consent by the landlord does not necessarily mean protection from eviction, and thus does not always provide security of tenure

## SOCIAL VULNERABILITY

Social vulnerability and individuals with special needs include households with members in the following categories: (a) female single-headed households<sup>19</sup>; (b) disabled or chronic illness; (c) older persons (above age 60); (d) pregnant or lactating women; (e) indigenous populations; (f) vulnerable children (orphaned or unaccompanied); (g) very large families (8+); and (h) 4P beneficiaries.

An important element of any shelter response is appropriate targeting of the most vulnerable households for initial assistance. When comparing the percentage of vulnerable households that received shelter assistance to the percentage of non-vulnerable households that received shelter assistance, a small, yet clear tendency toward targeting of vulnerable households can be seen. **Overall, 41% of vulnerable households reported having received shelter assistance, compared to only 33% among non-vulnerable households.**

Table 5: Social Vulnerabilities in Purported No-Build Zones and non-No-Build Zones

Vulnerability	Non-No-Build Zone	No-Build Zone
Female single-headed HH	11%	17%
Disabled or chronic illness	37%	35%
Older persons (above 60)	28%	25%
Pregnant or lactating women	18%	22%
Indigenous population	0.36%	0.60%
Orphaned or unaccompanied children	4%	5%
Very large families (8+)	7%	10%
4P beneficiaries	27%	32%

<sup>i</sup> As reported by households, percentage of households with at least one member exhibiting the stated vulnerability

Comparing households that believe that they live in proposed “no-build zones” to those that do not shows that proposed “no-build zones” exhibit higher levels of reported vulnerability. Particularly, the vulnerabilities of female single-headed households and 4P beneficiaries are reported to be substantially higher in “no-build zones” suggesting that these are two major groups to whom assistance should be prioritised where possible in “no-build zones” and during the relocation process.

The most affected areas of Typhoon Haiyan are largely those areas that had higher incidences of poverty and resulting social and economic vulnerability. According to the 2012 Full Year Official Poverty Statistics from the National Statistical Coordination Board (NSCB)<sup>20</sup>, the entire Region VIII had a poverty incidence of 45.2% among the population, while Regions VI and VII had poverty incidences of 29.1 and 30.2, respectively. The highest incidences of poverty were in Eastern Samar with 63.7% and Samar with 50%. It is therefore not surprising that these two provinces report higher levels of social and economic vulnerability when compared to the other provinces. The province of Leyte follows closely behind and is even more pronounced when controlling for Tacloban City. When looking at the proxy indicator of poverty – the incidence of 4P beneficiaries – 36% of Samar households report being 4P beneficiaries; this is an 8% difference over the mean. Eastern Samar, Aklan and Capiz are right around the mean. This report attempts to take these pre-existing vulnerabilities into account, but all data should be viewed through this lense – namely that some of the most typhoon-affected areas were also some of the most vulnerable, thus reconstruction would be expected to take longer and perhaps a disproportionate amount of support when compared to the other provinces could be needed.

<sup>19</sup> The definition of single-headed households was clarified with the enumerators, greatly reducing the number of households that could be defined as single-headed. The current assessment percentage for single-headed households more accurately reflects the proportion within the assessed population.

<sup>20</sup> <http://www.nscb.gov.ph/poverty/data/fullterm2012/Report%20on%20the%202012%20Full%20Year%20Poverty%20Statistics.pdf>

## SHELTER SECTOR FINDINGS

This section of the report focuses on shelter-specific indicators and specifically on those indicators that provide a picture of the current status of shelters and dwellings in the 50 kilometre typhoon zone as well as the outcomes of the humanitarian response. The three main areas of investigation include: (1) the current needs of the affected population, taking into account current housing damage levels, household-level self-recovery capacities and disaggregated shelter assistance needs based on an index of indicators; (2) current household access to services and facilities; and, (3) the outcomes of the shelter sector recovery response, focusing on the parameters of safety and advocacy, as defined in the shelter recovery guidelines.

### GLOBAL SHELTER CLUSTER INDICATORS

Code	Indicator Type	Description	Initial Value %	Monitoring 1 Value %	Monitoring 2 Value % <sup>21</sup>	Source
S1-1-2	Baseline/ Outcome	% of HHs indicating shelter as a priority need	23%	-	29%	REACH
S1-2-9	Outcome	% of beneficiary HHs satisfied or fairly satisfied with the shelter assistance they received	-	85%	78%	REACH
S1-1-3	Needs	% of damaged houses / dwellings	96%	88%	89%	REACH
S1-2-1	Output	% of HHs having received shelter assistance	15%	39%	38%	REACH
SSRP-1	Outcome	% of damaged and assisted HHs that have not yet achieved a minimum level of safety <sup>22</sup>	-	-	76%	REACH
SSRP-2	Outcome	% of damaged and assisted HHs that have not yet achieved a minimum level of adequacy <sup>23</sup>	-	-	39%	REACH

The two outcome-level indicators that will be included as part of a revision to the Strategic Response Plan (SRP) for the Shelter Cluster are coded above as SSRP-1 and SSRP-2. These indicators are intended to provide feedback on the success of the sector response in providing safe and adequate shelter support for self-recovery of the affected population.

It should be noted that whilst the SSRP-1 is high, the safety aspects that were assessed looked at structural features whereas the majority of assistance provided so far has been emergency in nature (tents and tarps); the extent to which these activities can return people to a 'safe and habitable' dwelling is therefore limited. This reinforces the importance of recovery shelter activities, which stand a far better chance of returning people to a safe, habitable situation. Recovery activities have been more limited in number than hoped primarily due to funding constraints and also require longer to implement. Furthermore, from the start of the response the Shelter Cluster's strategy has been about supporting people with their own recovery with the majority of recovery activities (87 per cent) being in the provision of shelter repair kits. This is explored further in the Shelter Response Outcomes section below.

<sup>21</sup> The margin of error is 1.57 for overall figures, meaning that the results can differ nearly plus or minus 2% from the stated figure

<sup>22</sup> As specified in the Shelter Cluster recovery guidelines

<sup>23</sup> Ibid.

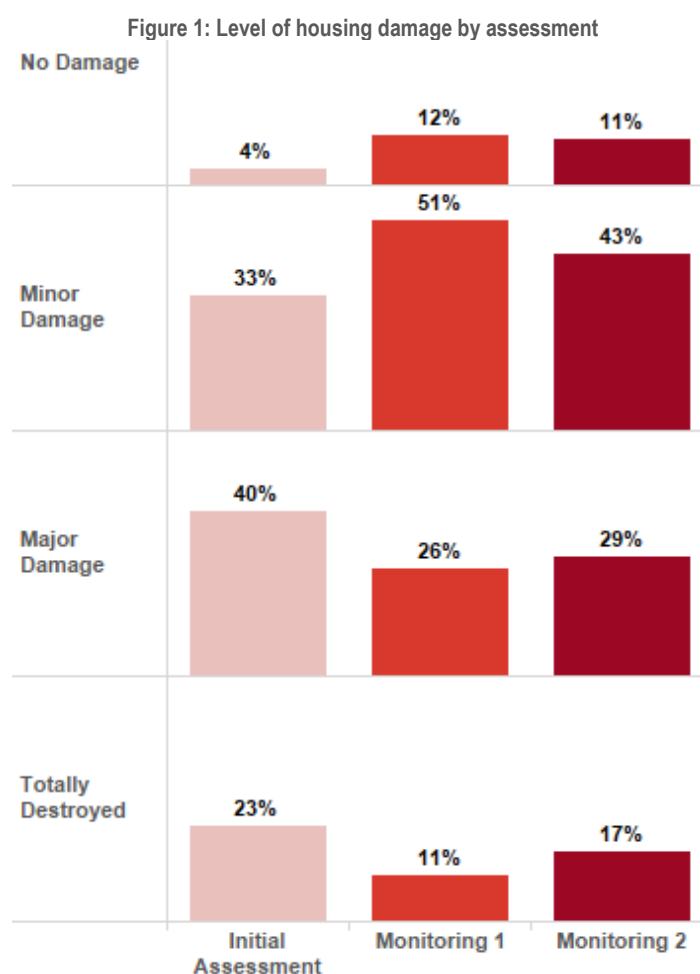
## NEEDS OF AFFECTED POPULATION

This section outlines the evolving response needs and self-recovery capacity of the typhoon-affected population within 50 kilometres of the storm path by reviewing three critical aspects of shelter need: (1) current housing damage levels; (2) the capacity of households to self-recover; and, (3) specific categories of shelter need based on both enumerator and self-assessment classifications. Beyond the overall figures, the analysis will look at differences in figures between reported “no-build zone” households and non-no-build zone households as well as discussing differences between provinces.

### REMAINING VISIBLE HOUSING DAMAGE LEVELS

Remaining visible housing damage levels were measured through direct observation by enumerators using the categorisation system mentioned in the methodology above. Four categories were used to classify each assessed house or structure: (1) no damage; (2) minor damage; (3) major damage; (4) totally destroyed.

**Overall, 89% of households still showed varying levels of typhoon-related damage.** Among the affected population, 17% of dwellings were classified as still being totally destroyed by the typhoon; 29% were classified as having major damage, while 43% had minor damage. Only 11% of the households were considered to have no damage.



By tracking remaining visible damage levels at points along the recovery process, some measure of recovery can be extrapolated. Although the percentages of houses in each damage category vary from the last assessment, these figures indicate that **there has been no significant reduction in overall remaining visible damage levels since the last monitoring report**. The slight increase in totally destroyed dwellings and negligible change in the no damage category suggests that **recovery efforts appear to have slowed dramatically**. Some of these differences could be due to a greater number of households engaging in reconstruction efforts, making damage levels seem higher as houses are demolished or in the midst of reconstruction.

### Remaining Visible Housing Damage and No-Build Zone Analysis

In comparing households reporting that they live in purported “no-build zones” with those that report not living in these areas, damage levels are significantly higher in the more vulnerable “no-build zones”. When comparing the totally destroyed figure between the two self-reported zones, **15% more households were classified as totally destroyed in “no-build zones”**. Comparing this to the overall results above, the proportion of totally destroyed houses is 8% higher in “no-build zones” further supporting the explanation for the increase in overall total destruction figures during this assessment, as anecdotal and observational evidence suggests that many households are disassembling, their homes or have not begun recovery because of uncertainty in anticipation of relocation. Furthermore, the number of households classified as having no damage is substantially lower in “no-build zones”, suggesting that levels of damage in these areas were much higher to begin with, that the higher levels of vulnerability have limited recovery and ongoing issues around provision of assistance in these areas.

Table 6: Remaining Visible Damage Levels No-Build Zones Versus Non-No-Build Zones

Damage Classification	Non-No-Build Zones (%HH)	No-Build Zones (%HH)
No Damage	11%	6%
Minor Damage	46%	36%
Major Damage	29%	29%
Totally Destroyed	14%	29%

### Remaining Visible Housing Damage and Provincial Analysis

When disaggregating the results by province, the damage levels vary from the mean for four provinces. Around 99% of households in Biliran, Eastern Samar, Samar and Leyte all have some form of remaining shelter damage as a result of the typhoon. Eastern Samar has the highest levels of remaining totally destroyed houses at 47%, with Samar and Leyte second and third at 28% and 27%, respectively. Biliran has a high level of houses that still show major damage – 45%, while Negros Occidental has the highest percentage of partially damaged houses, at 67%. These results align with the initial assessment and the first monitoring assessment damage findings showing greater impact of the storm across Region VIII, thus levels of visible damage can be expected to remain higher for longer.

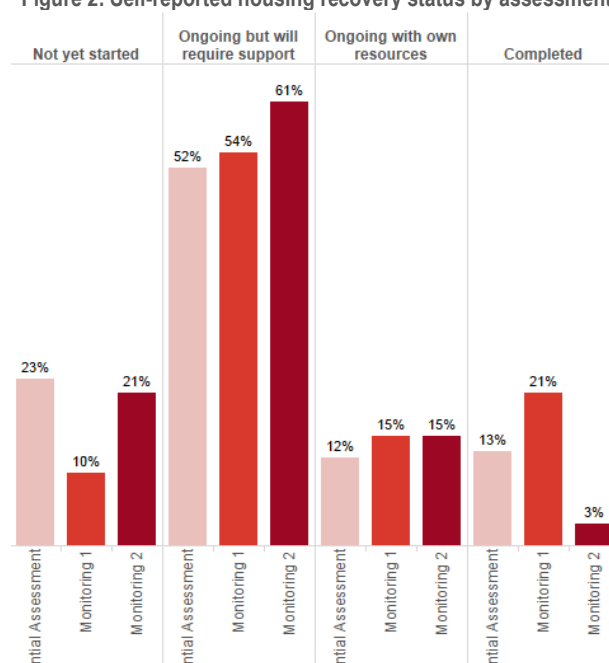
### SELF-RECOVERY CAPACITY

As a measure of the affected population’s belief about their own household’s ability to self-recover, the assessment analysed the response to questions about the household’s perceived ability to complete their housing recovery or continued need for assistance.

## Housing Recovery Status

Overall, 61% of the affected population that reported an intention to rebuild or repair believe they still require assistance to complete their housing recovery, while 15% believe they can recover using their own means; 21% of households have yet to begin housing recovery while 3% believe they have recovered.

Figure 2: Self-reported housing recovery status by assessment



Therefore, 18% of households believe that they have either completed their housing recovery or will complete with their own resources and do not need any additional support. 82% of households, however, believe that they need further support to continue or begin the housing recovery process. These figures remain largely the same as the previous monitoring assessment except for a decrease in households that believe they have completed recovery and a corresponding increase in households that report they have not yet started recovery. Given the “no-build zone” analysis below that shows very little difference between “no-build zones” and non-no-build zone areas, the only logical explanation for these related changes in perceived self-recovery status is that households are now looking to longer-term and more durable housing solutions at this point in the recovery process. Whereas four months ago, households may have been focused on continued emergency assistance and, thus, answered questions through this lense, households now may be defining “recovery” as having a more durable house, leading to more households responding that they have not yet started recovery and fewer responding that they have completed recovery.

## Housing Recovery Status and No-Build Zone Analysis

In purported no-build zones, 61% of households reported that their recovery is ongoing but they still need support to finish. Almost 19% report not having started recovery. Only 3% of households living in purported no build zones reported having completed recovery.

These figures are nearly the same as the reported self-recovery figures for households believing that they live in non-no-build zone areas, indicating that reported self-recovery capacity is the same for the general population as for those households living in no-build zones. This could possibly be due to different conceptions of what recovery activities and completion constitutes between the general affected population and those households living in purported no-build zones.

Table 7: Perceived self-recovery status, purported no-build zones versus non-no-build zones

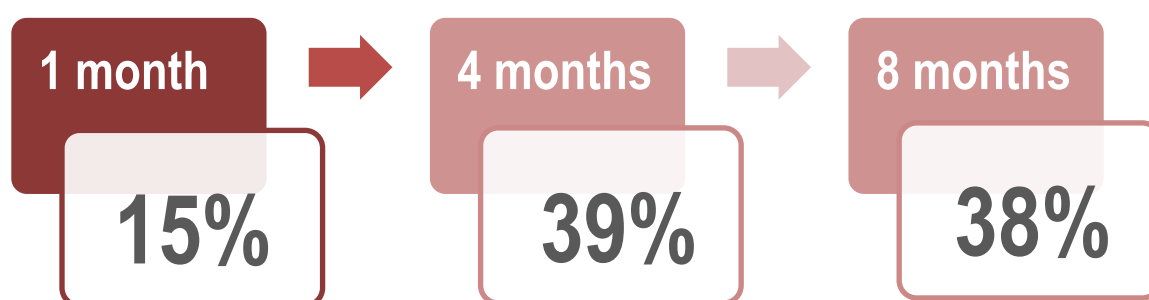
Perceived Self-Recovery Status	Non-No-Build Zones (%HH)	No-Build Zones (%HH)
Not yet started	22%	19%
Ongoing but will require support	61%	61%
Ongoing with own resources	14%	17%
Completed	3%	3%

Indeed, this difference in conception of completed recovery can be seen when looking at objective enumerator observations classifying current shelter types in “no-build zones” compared to non-no-build zone areas. 15% of households in non-no-build zone areas were considered to have completely repaired houses compared to only 9% in “no-build zones”. Furthermore, households in “no-build zones” were 8% more likely to be classified as makeshift compared to non-no-build zone areas. This suggests that while households in “no-build zones” perceive their recovery status to be similar to that of households in non-no-build zones, their conception of completed recovery is quite different from non-no-build zones and does not necessarily mean that these two areas have the same self-recovery levels. This is further supported by the damage analysis above and the shelter outcomes analysis below.

### Housing Recovery Status and Provincial Analysis

The highest proportions of households stating that they require additional support to recover are in the provinces of Biliran, Eastern Samar, Leyte and Samar. Between 70-80% of households in these provinces believe they need further assistance in order to begin or to continue the recovery process. This is compared to 40-60% in the other provinces. The provinces of Aklan and Capiz, on the other hand, have high proportions of households that believe they have either completed or can complete recovery with their own means - 26% and 20%, respectively. This is nearly four times higher than in the provinces of Samar and Easter Samar. These proportions are much the same as in the first monitoring assessment and align with the differing levels of major damage and totally destroyed households between these areas.

### SHELTER ASSISTANCE NEEDS



The negligible difference between households reporting to have received shelter assistance in the first monitoring assessment and the current assessment again suggests that **assistance has stagnated or that temporary and permanent housing assistance is going to the same households that received emergency assistance**, thus there is no overall increase in the reach of shelter assistance.

**Only 38% of assessed households reported having received shelter assistance.** Of the 38% of households who report having received shelter assistance, 80% received only emergency assistance<sup>24</sup>, 16% reported receiving temporary housing and 4% permanent housing assistance. Some of those households receiving temporary or permanent housing assistance also received emergency assistance<sup>25</sup>.

The lack of pre-disaster housing construction quality data for the affected area has led the assessment team to use a two-pronged approach to assess the safety and adequacy of housing recovery: (1) an independent enumerator assessment of the quality of the structure using the minimum standards as agreed to by partners in the shelter recovery guidelines; and (2) a household respondent self-assessment.

Each methodology has its own advantages and disadvantages. While households may perceive their home as far from complete, enumerators may perceive that they have sufficiently recovered as to not need further assistance. Conversely, a household may perceive that their house is safe and adequate for their purposes, while an independent enumerator using objective minimum standards may determine that the structure is unsafe or inadequate and that the household may require further assistance to ensure a minimum humanitarian standard has been achieved.

**Objective visual assessments by enumerators indicated that 72% of households were potentially in need of further shelter assistance so as to achieve a minimum level of safe adequate permanent housing.** For some of these families, permanent solutions remain unclear, hence, temporary shelter assistance may be required as a bridging solution (approximately 17% of all households). **Others (9%) continue to live in a state of inadequate unsafe emergency shelter** and thus may require further emergency shelter assistance unless more durable permanent solutions are rapidly forthcoming.

The following section of the report addresses these shelter needs in order of priority from emergency to permanent.

## Emergency Shelter

**According to the enumerator assessment, nearly 9% of all assessed households are potentially in need of ongoing emergency shelter assistance should temporary or permanent solutions not be available.** These consist of all typhoon-affected households currently living in emergency or makeshift shelters that are deemed inadequate or unsafe according to the scale developed for this assessment based on criteria in the shelter recovery guidelines.

**According to the self-assessment, over 8% of all assessed households report potentially needing emergency assistance should temporary or permanent solutions not be available.** These consist of all households currently living in emergency or makeshift shelters that report an intention to rebuild or repair, yet believe they require support to recover or have not yet started recovery.

The similarity between the overall proportion of households that were assessed as potentially needing continued emergency shelter assistance using the enumerator and self-assessment indices suggests that this reflects an accurate picture of remaining emergency needs.

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<sup>24</sup> 31% of those households receiving shelter assistance reported receiving emergency shelter and 49% reported receiving materials. Materials were most often reported as emergency assistance, suggesting that 80% of shelter assistance recipients received emergency shelter assistance

<sup>25</sup> Emergency assistance: households that reported receiving emergency assistance. Temporary assistance: households that reported receiving temporary, host family support, rental support or bunkhouse assistance. Permanent assistance: households that reported receiving permanent housing or core housing.



When disaggregating by province, Eastern Samar and Samar have the highest proportions of households potentially in need of emergency shelter at 19% and 14%, respectively, of households in each province classified as such. This constitutes 22% and 16%, respectively, of all households potentially in need of continued emergency shelter assistance.

### Temporary Shelter

**According to the enumerator assessment, 17% of all assessed households are potentially in need of temporary shelter solutions.** These are affected households located in no-build zones living in dwellings considered inadequate or unsafe according to the scale developed for this assessment based on criteria in the shelter recovery guidelines. **This constitutes 80% of all households living in no-build zones.**

**According to the self-assessment, 21% of all assessed households report potentially needing temporary assistance.** These are affected households located in no-build zones that report an intention to rebuild or repair, yet believe they require support to recover or have not yet started recovery. **This constitutes 98% of all households living in no-build zones.**

The similarity between the overall proportion of households that were assessed as potentially needing temporary shelter assistance using the enumerator and self-assessment indices suggests that this reflects an accurate picture of households potentially needing temporary shelter assistance.

When disaggregating by province, Biliran and Negros Occidental contain the largest proportions of households potentially in need of temporary shelter. 33% of households in Biliran and 30% in Negros Occidental were classified as potentially needing temporary shelter. This corresponds to the higher proportions of households reporting that they live in no-build zones in these provinces – 37% in Biliran and 42% in Negros Occidental.

### Permanent Shelter

**According to the enumerator assessment, households potentially in need of permanent shelter solutions constitute 72% of all assessed households.** These include all households living in emergency or temporary shelters, plus all other affected households that are not defined as safe/fairly safe or adequate/fairly adequate according to the scale developed for this assessment based on criteria in the shelter recovery guidelines.

**According to the self-assessment, households potentially in need of permanent shelter solutions constitute 96% of all assessed households.** These include all households living in emergency or temporary shelters, plus all other affected households that report an intention to rebuild or repair, yet believe they require support to recover or have not yet started recovery.

When disaggregating by province, the four most highly affected provinces again emerge. Around 83% of households in Samar, Eastern Samar, Leyte and Biliran each are potentially in need of permanent shelter support. The lower comparative number of households living in no-build zones in these provinces along with their relative remaining high damage levels and existing vulnerability contribute to these high proportions of potential permanent shelter needs.

## **ACCESS TO SERVICES AND FACILITIES**

For each household surveyed, the assessment looked at current access to the following services and facilities, as reported by households: drinking water; toilet and bathing facilities; livelihood opportunities; and communal facilities.

It is important to note that for the 21% of families who reported they were living in no-build zones, access to services and facilities remains unclear as they face relocation. Permanent relocation far from the existing site raises concerns regarding access to livelihoods, while temporary relocation may affect access to water, sanitation, and cooking facilities.

### **DRINKING WATER**

**The majority of households have access to tube wells with a hand pump (35%) and piped water (31%).** A relatively smaller proportion use spring-sourced water (12%) or purchase their water (12%) from designated water purifiers. The remaining households use open wells (8%), tanks (1%) or other sources (0.44%) for their drinking water.

### **TOILETS AND BATHING FACILITIES**

**Nearly 17% of assessed households report that they do not have access to a toilet – a possible indicator of open defecation.** The majority of households (70%) use private toilets for their hygiene needs while 14% use communal toilets.

The provinces of Samar, Leyte, Eastern Samar and Biliran have the highest proportion of households without any toilet facilities ranging from 22% in Eastern Samar to 35% of households in Samar. The provinces of Aklan, Antique, Capiz and Iloilo, on the other hand, have very high proportions of households using private toilets, ranging from 81% in Iloilo to 87% in Antique.

**Of the 70% of households that use private toilets, 39% do not consider their toilets to provide ample privacy.** This proportion is much larger among communal toilet users, with 94% considering their facilities as not providing reasonable privacy. Of the households that have access to bathing facilities, 41% consider these facilities provide inadequate privacy.

The provinces of Samar, Leyte, Eastern Samar and Biliran have by far the lowest proportion of households reporting inadequate privacy in their bathing facilities from only 34% in Samar to 49% in Biliran, despite being the hardest hit and having the highest levels of existing social and economic vulnerabilities of all provinces in the affected area.

### **LIVELIHOOD OPPORTUNITIES**

**43%% of all assessed households reported not having access to livelihood opportunities.** This figure is largely the same for households living in “no-build zones” compared with those living in non-no-build zone areas. This overall figure is slightly higher than the census figures for unemployment and underemployment that show an average rate of 5.4 and 20.2, respectively, for the three assessed regions<sup>26</sup>. This suggests a perception of lack of access to livelihoods likely due to the disruption in typical livelihoods activities, especially among fisherfolk and farmers.

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<sup>26</sup>[http://www.census.gov.ph/sites/default/files/attachments/hsd/specialrelease/TABLE%201%20Labor%20Force%20Participation%2C%20Employment%2C%20Unemployment%20and%20Underemployment%20Rates%2C%20by%20Region%20October%202013\\_1.pdf](http://www.census.gov.ph/sites/default/files/attachments/hsd/specialrelease/TABLE%201%20Labor%20Force%20Participation%2C%20Employment%2C%20Unemployment%20and%20Underemployment%20Rates%2C%20by%20Region%20October%202013_1.pdf)

The province of Negros Occidental is the only province with a significant proportion of households reporting access to livelihood opportunities below the mean. 58% of households in this province report not having access to livelihood opportunities.

A lack of livelihood opportunities is likely to have a serious effect on household ability for housing recovery and the continued need for shelter assistance.

### ***COMMUNITY FACILITIES***

**24% of households reported not having adequate access to community facilities such as health care facilities, schools, government offices or public transportation.** A slightly greater proportion of households report not having access to community facilities in “no-build zones” (27%) when compared with non-no-build zone areas (23%).

When disaggregating by province, Samar and Leyte are far below the mean at 40% and 38%, respectively, of households reporting not having access to community facilities.

## OUTCOMES OF SHELTER SECTOR RESPONSE

To determine recovery, it is important not only to look at the quantity of houses that have been repaired or reconstructed, but also at the quality and safety of these efforts. To measure outcomes of the shelter sector response, the assessment analysed data on the classification of main features of the dwellings in which assisted households lived, using the Shelter Cluster's agreed shelter recovery guidelines<sup>27</sup> as a framework. Minimum safety and adequacy features as agreed by Shelter Cluster members in the shelter recovery guidelines were used as the basis for assessing the safety and adequacy of each household. These guidelines serve as a minimum standard for safety and adequacy of dwellings. The following safety features were assessed: (1) site, (2) shape, (3) foundation, (4) tie-down, (5) bracing, (6) strong joints and (7) roofing. Each of these features was rated as "none", "poor", "okay" or "good" by enumerators. A scale was developed to provide a classification for each dwelling to measure how resistant to future disasters the dwelling is:

- Safe dwelling = all specifications good or okay
- Fairly safe dwelling = 1 to 3 specifications were poor or were not present
- Fairly unsafe dwelling = 4 to 6 specifications were poor or were not present
- Very unsafe dwelling = all 7 specifications were poor or were not present

The following adequacy features were assessed: (1) space, (2) durability, (3) drainage, (4) ventilation, (5) ceiling height, (6) privacy, (7) security and (8) accessibility. Each of these features was rated as "present" or "not present" by enumerators. The following scale was used to provide a classification for each dwelling:

- Adequate = all specifications present or over the required specification
- Fairly adequate = 1 to 3 specifications were not present (score 1 to 3)
- Inadequate = 4 to 7 specifications were not present (score 4 to 7)
- Totally inadequate = all specifications were not present or were less than the required specification (score 8)

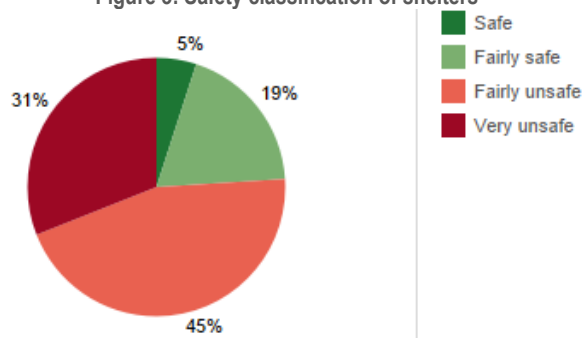
## SAFETY OF STRUCTURES

Out of the total affected household population that was present, had shelter damage and were assisted with shelter assistance, **31% of dwellings were classified as still very unsafe** and 45% were classified as still being fairly unsafe; while only 24% were classified as being fairly safe or safe. This raises concerns about the adequacy and effectiveness of much of the shelter assistance that has been provided, particularly in terms of technical support and training to ensure households are building back safer. As stated before, however, the safety aspects that were assessed looked at structural features whereas the majority of assistance provided so far has been emergency in nature (tents and tarps); the extent to which these activities can return people to a 'safe and habitable' dwelling is therefore limited. **When looking at the safety statistics for households that received non-emergency types of assistance, 30% were classified as being fairly safe or safe – a higher proportion than among households receiving any type of shelter assistance.** This reinforces the importance of recovery shelter activities, which stand a far better chance of returning people to a safe, habitable situation. Given that the focus of this response has been on self-recovery, there should be an increased focus on technical assistance, trainings and public outreach on building back safer so as to support households in their self-recovery.

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<sup>27</sup>[https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/Recovery%20Shelter%20Guidelines%20DRAFT\\_140524\\_SAG%20Approved.pdf](https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Documents/Recovery%20Shelter%20Guidelines%20DRAFT_140524_SAG%20Approved.pdf)

Figure 3: Safety classification of shelters

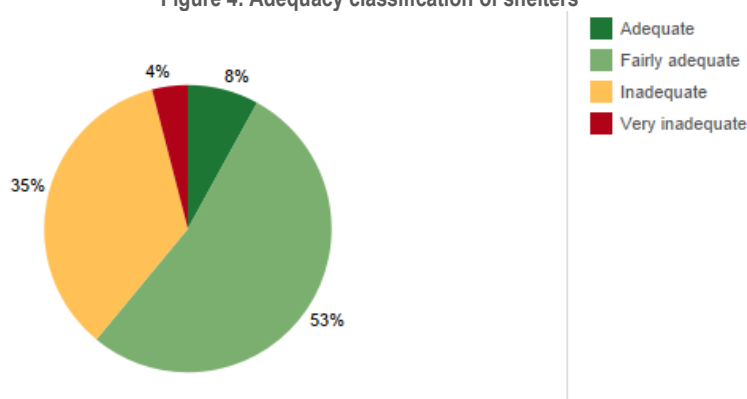


When disaggregating by province, a clear pattern emerges when compared to the other indicators discussed in previous sections. Households in Biliran, Capiz, Eastern Samar and Samar have the highest proportions of fairly unsafe households – ranging from 4-11% above the mean. Aklan, Antique and Leyte have the highest proportions of very unsafe households at 39%, 48% and 40%, respectively – 8-17% above the mean. Negros Occidental and Cebu are the only two provinces with any significant proportions of households found in the safe or fairly safe classifications – 24% safe in Negros Occidental, 40% fairly safe in Cebu.

### ADEQUACY OF STRUCTURES

Out of the total affected household population that was present, had shelter damage and were assisted with shelter assistance, **4% were classified as totally inadequate** and 35% were classified as being inadequate; 61% were classified as being fairly adequate or adequate.

Figure 4: Adequacy classification of shelters

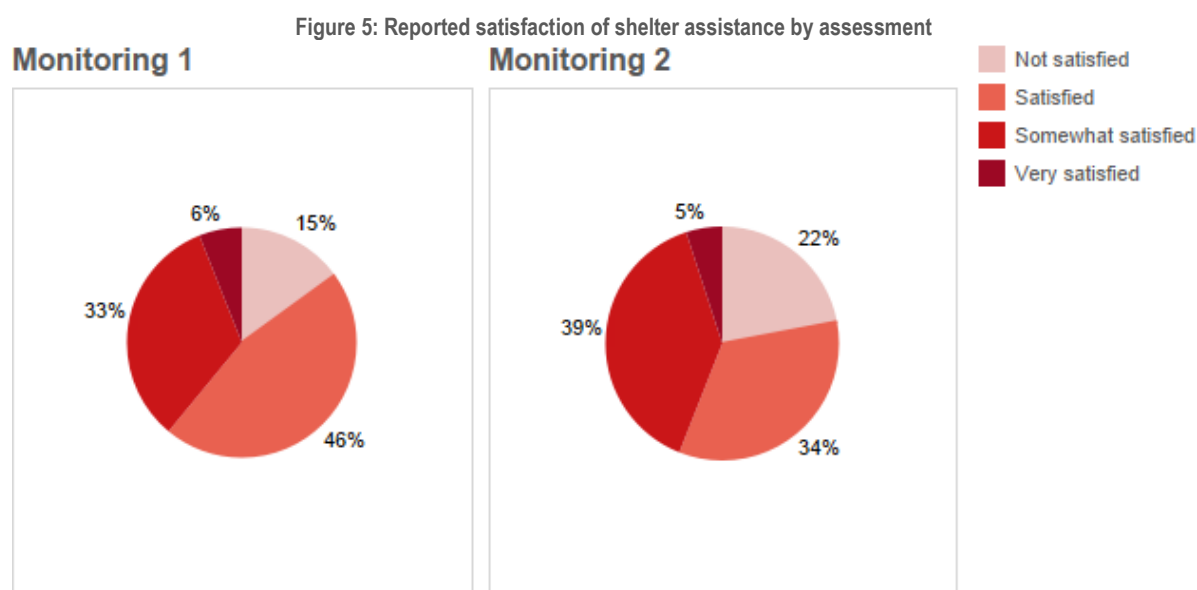


When disaggregating by province, a similar pattern to the structural safety data emerges. The provinces of Biliran, Eastern Samar, Leyte and Samar all have above average proportions of households classified as inadequate or totally inadequate – 13-18% above the mean for inadequate dwellings and around 6% above the mean for totally inadequate dwellings in Eastern Samar and Leyte. Looking at high levels of adequacy, Negros Occidental has 43% of households classified as adequate, while 69% and 83% of households in Aklan and Antique are classified as fairly adequate, respectively.

### SATISFACTION WITH ASSISTANCE

Overall, the majority of households that have received shelter assistance are somewhat satisfied or satisfied with the assistance they received. **22% of assistance recipients, however were not satisfied with the shelter assistance they received – a significant increase from the first monitoring assessment that found that only 15% of households were unsatisfied with the assistance they received.**

Given the large percentage of the population that are still in real need of assistance according to their own assessment as well as objective enumerator assessments, this increasing dissatisfaction and frustration is not surprising, but is also a potential security issue that agencies should take into consideration moving forward.



The pattern found in the first monitoring assessment in which households seemed slightly more satisfied with the assistance they had received in the provinces of Eastern Samar, Iloilo, Leyte and Samar is not found in this assessment. In fact, the provinces of Biliran, Eastern Samar, Leyte and Samar now showed higher levels of dissatisfaction than the other provinces. The first monitoring assessment assumed that the higher levels of satisfaction in these provinces was potentially due to the fact that damage rates were higher in these areas and, thus, assistance was faster and met more immediate needs than in other locations. This very well could have been accurate, but it is likely that the assistance has slowed to these areas and that less-immediate long-term needs are not being met in this recovery period, eliciting dissatisfaction among households in the areas most affected by the typhoon.

## CONCLUSIONS AND RECOMMENDATIONS

### *SHELTER SECTOR CONCLUSIONS*

Eight months after the devastating typhoon that hit the Central Philippines and led to an unprecedented humanitarian response for the country, recovery seems to have slowed and households have grown increasingly frustrated with the stagnation of assistance as longer-term assistance needs are not being met. As the previous monitoring assessment report described, initial emergency shelter assistance seems to have been successful in meeting immediate needs, but as additional assistance seems to have flowed to some of the same households, the scope of the recovery has been limited.

The stagnation in recovery and the inability of assistance to meet current needs can be seen in both the results showing remaining visible damage and the reported self-recovery capacity of households. Objective damage assessments show that there has been little change in remaining visible damage levels in the affected area and, in fact there has been a slight increase in dwellings showing major damage or were categorised as totally destroyed. While some of this can be explained by the ongoing recovery process and the resulting demolition of houses, the lack of any increase in undamaged houses suggests that shelter recovery has not moved forward. Furthermore, households perceive their housing recovery capacity as diminishing when compared to the previous monitoring assessment, with an 86% decrease in households believing their housing recovery to be completed since the previous shelter response monitoring assessment conducted in March 2014. As housing recovery needs become more long-term, households feel that they increasingly lack the resources necessary to complete the housing recovery process.

This perceived lack of capacity is also met with an increasingly dissatisfied population seen in the 47% increase in the proportion of households that report not being satisfied with the assistance they have received since the first monitoring assessment. Given the large percentage of the population that are still in real need of assistance according to their own assessment as well as objective enumerator assessments, this increasing dissatisfaction and frustration is not surprising, but is also a potential security issue that agencies should take into consideration moving forward.

Beyond the satisfaction levels of the assisted population, the reality is that the outcome of the shelter assistance that has reached households has not led to minimum levels of safety or adequacy for much of the population. 76% of dwellings were objectively classified as still being very unsafe or fairly unsafe, while 39% were objectively classified as being very inadequate or inadequate.

As households prepare for relocation, it will be important that existing vulnerabilities are accounted for and that agencies work with households to build back safer and change existing conceptions of what constitutes a safe or adequate dwelling, where necessary.

Households continue to feel that their capacity to self-recover is limited and increasingly diminishing amounts of assistance continue to flow to the same locations at the possible expense of other locations more in need. If this continues, the humanitarian community runs the risk of the recovery process across the entire affected area remaining stagnated.

## ***SHELTER SECTOR RECOMMENDATIONS***

As with the findings of the assessment carried out in March there still remains considerable outstanding needs. This has become even more apparent now that the response is firmly in the recovery phase. It was agreed at the beginning of the response that the priority need was for maximum coverage with the focus being on support to self-recovery. Although wide coverage was achieved in the emergency phase this has very much slowed in the recovery phase, understandable, to a degree, given recovery shelter programmes take longer to plan and implement. However with areas such as Samar and Eastern Samar evidently requiring additional support to recover there is not only a clear need for more assistance but there also needs to be an increased awareness around comprehensive targeting so as to safeguard against duplication in assistance and to reach those that are the most socially and economically vulnerable.

This assessment also shows a heightened need for technical assistance, training and building back safer messaging especially to those who receive shelter repair kits. Additionally such information and support should also be made more widely available to those households who may not be included in any assistance programmes, thus helping to create a broader understanding and knowledge generation around building back safer and ensuring that self-recovery can also lead to more resilient structures being built. Moreover communication planning and support should also be provided to DSWD at the municipal level so as to ensure build back safer messages are incorporated in the delivery of its Emergency Shelter Assistance and National Community Driven Programmes.

The comparison in this assessment between purported 'no build zones' and non-no build zones shows that there is a continued need to work closely with relevant LGUs in identifying households in no build zones that can be provided with temporary assistance. Additionally the continued lack of land for the Government's resettlement programme means that partners who are looking to support those stuck in these areas will also need to be flexible in their programmatic approaches. Advocacy at the local level must continue for those who remain in purported no build zones especially around preparedness measures such as early warning systems and evacuation routes and centres. Given the uncertainty around resettlement such measures should be designed for the long term and not just as a temporary fix. Finally given the results around safety and adequacy consideration must be given to capacity building of LGUs so as to ensure a robust system of monitoring is put in place and enacted upon.



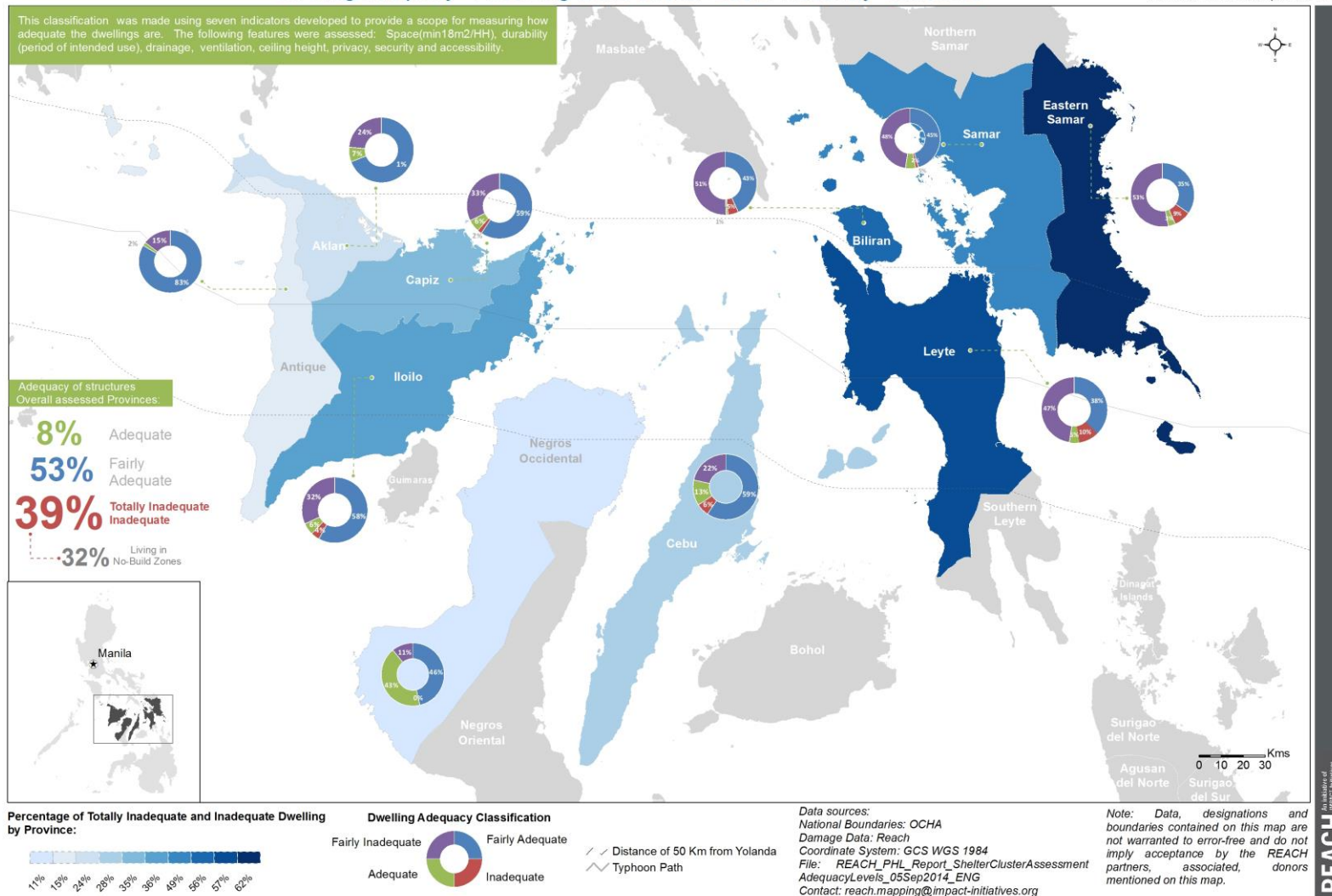
## Map 2: Dwelling Adequacy



### Philippines- Assessed Provinces

*Dwelling Adequacy - According to the Shelter Cluster Recovery Guidelines*

For Humanitarian Relief Purposes Only  
Production date : 05 September 2014



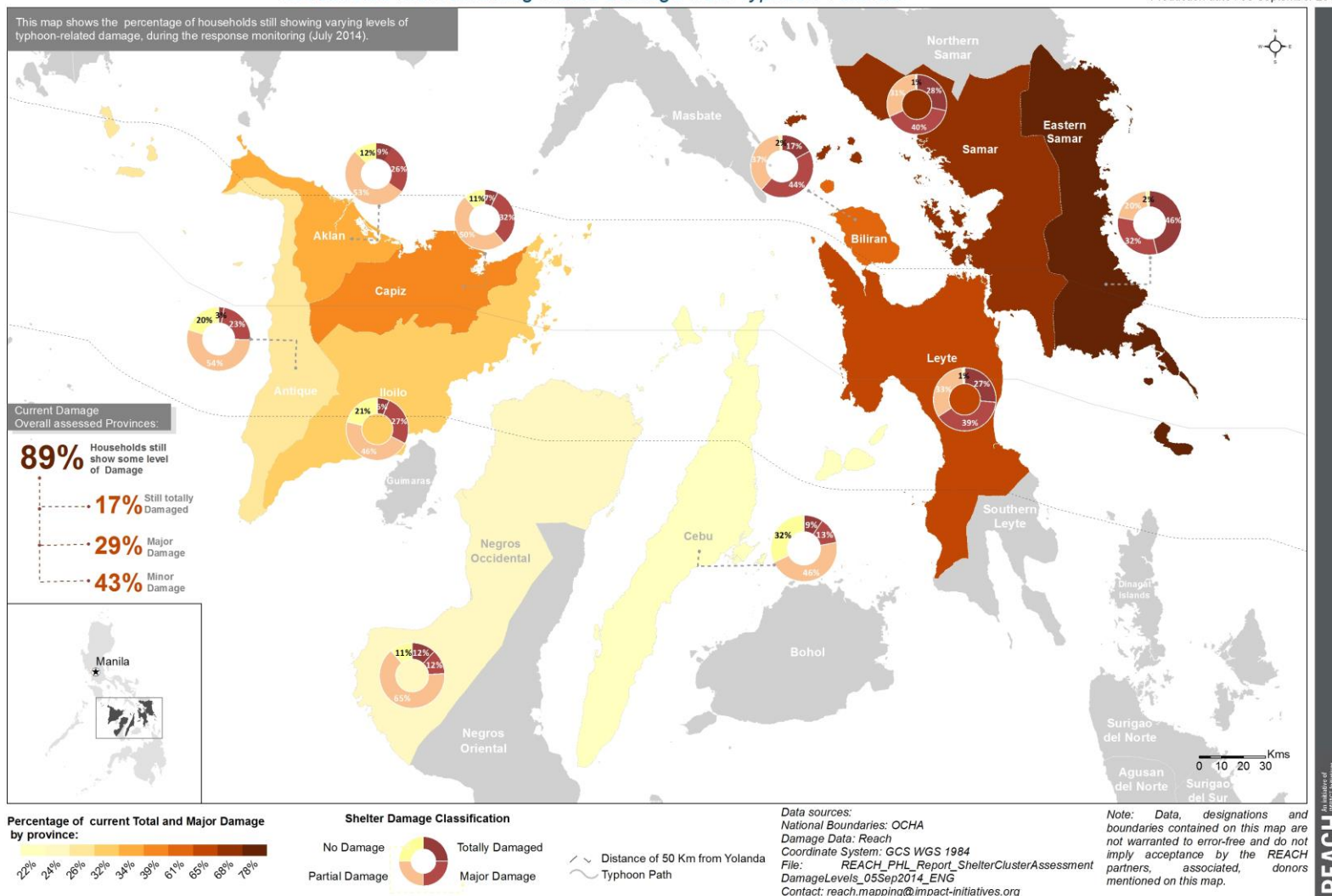
Map 3: Remaining Visible Damage Levels



## Philippines - Assessed Provinces

Households with remaining visible damage from Typhoon Yolanda

For Humanitarian Relief Purposes Only  
Production date : 05 September 2014



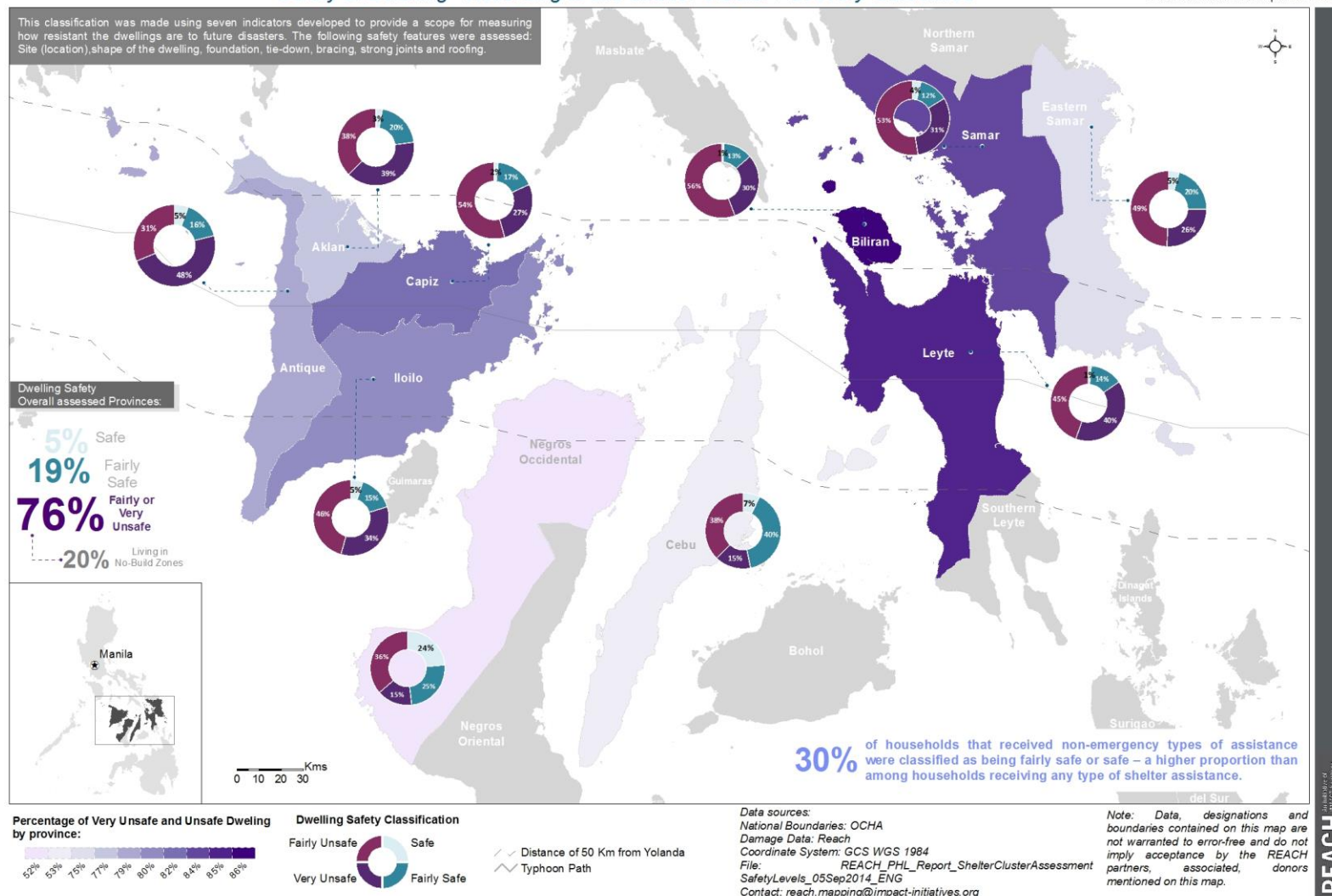
Map 4: Dwelling Safety



## Philippines- Assessed Provinces

Safety of Dwelling - According to the Shelter Cluster Recovery Guidelines

For Humanitarian Relief Purposes Only  
Production date : 05 September 2014





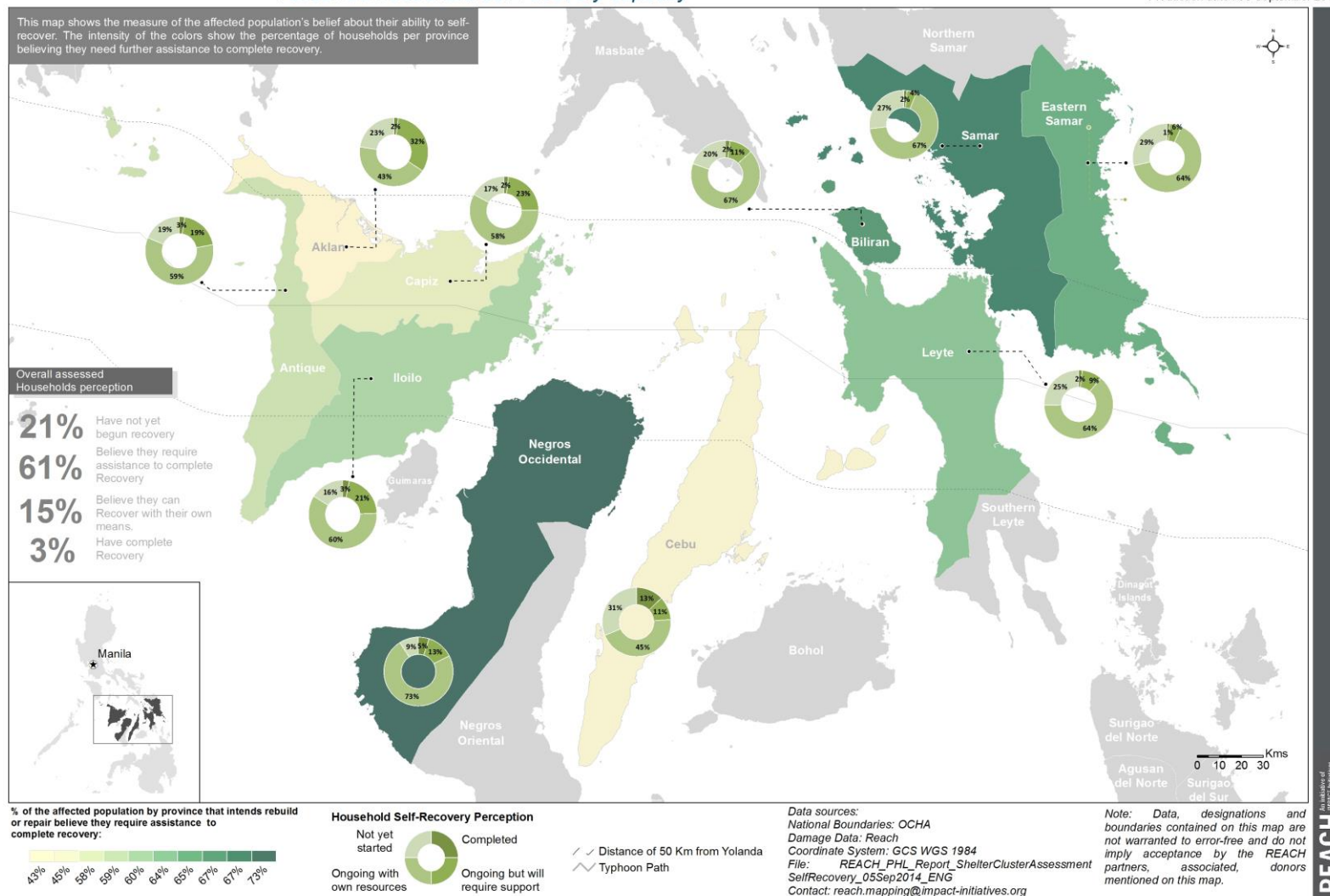
Map 5: Perceived Household Self-Recovery Capacity



## Philippines- Assessed Provinces

### Perceived household self-recovery capacity

For Humanitarian Relief Purposes Only  
Production date : 05 September 2014



## **ANNEXES**


***ANNEX A – DAMAGE LEVEL CLASSIFICATION GUIDE FOR ENUMERATORS***

***ANNEX B – BUILDING METHOD TECHNICAL GUIDANCE FOR ENUMERATORS***

***ANNEX C – HOUSEHOLD INTERVIEW QUESTIONNAIRE***

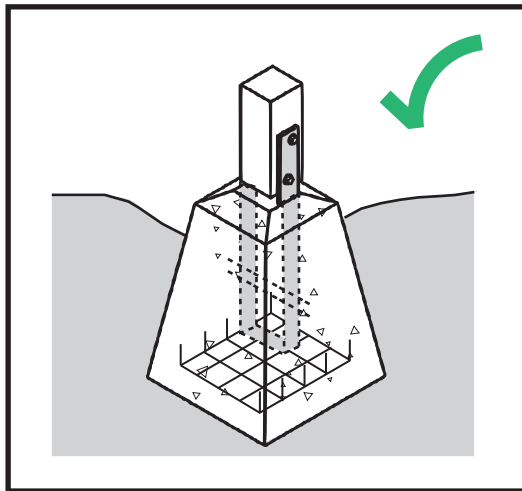
***ANNEX D – POPULATION EXTRAPOLATION CALCULATION WORKSHEET***

# Annex A - Damage Level Classification Guide for Enumerators

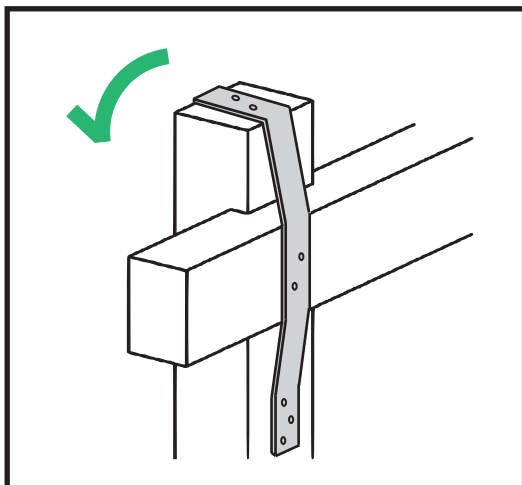
Damage Categories				
No Damage				
Minor Damage				
Major Damage				
Totally Destroyed				
Name	Dwelling Type	Photo example	Damage Type	Category
Hut	 <p>NIPA HUT HOUSE</p>		1. Collapsed totally	totally
			2. Building Tilting sideways (right or left)	major
			3. Wooden Posts/beams bent/cracked/ dislocated	major
			4. Walls missing/damaged	major
			5. Roof missing/damaged	major
			6. Doors and windows damaged	minor
			7. Floors – collapsed/broken	minor
			8. Stairs / collapsed/missing	minor
			9. Foundation off line from wooden posts	major
Timber Frame	 <p>TIMBER HOUSE</p>		1. Collapsed totally	totally
			2. Building Tilting sideways (right or left)	major
			3. Wooden Posts/beams damaged - dislocated	major
			4. Walls missing/damaged	major
			5. Roof missing/damaged	major
			6. Doors and windows damaged	minor
			7. Stairs / collapsed/missing	minor
			8. Foundation off line from wooden posts	major
Timber and Concrete (one storey)	 <p>TIMBER AND CONCRETE HOUSE (ONE STOREY)</p>		1. Collapsed totally	totally
			2. Tilting sideways (right or left)	major
			3. Concrete columns/beams damaged/bent/cracks/tilt	major
			4. Timber Walls/dislocated/broken/missing	major
			5. Concrete Hollow Block work /collapsed/tilt/cracks	major
			6. Roof damaged/missing	major
			7. Doors and windows damaged	minor
			8. Plaster/damaged/cracks/removed	minor
Concrete House (one Storey)	 <p>CONCRETE HOUSE (ONE STOREY)</p>		1. Collapsed totally	totally
			2. Tilting sideways (right or left)	major
			3. Concrete columns /beams/ damaged/bent/cracks/tilt	major
			4. Concrete Hollow Block work/collapsed/tilt/cracks	major
			5. Ceiling damaged/missing	minor
			6. Roof damaged/missing	minor
			7. Doors and windows damaged	minor
			8. Floor Slab / broken/cracks/split	minor
			9. Plaster/damaged/cracks/split	minor
Timber and Concrete House (two Storey)	 <p>TIMBER AND CONCRETE HOUSE (TWO STOREY)</p>		1. Collapsed totally	totally
			2. Tilting sideways (right or left)	major
			3. Concrete/Timber columns /beams/ damaged/bent/cracks/tilt	major
			4. Concrete Hollow Block work/collapsed/tilt/cracks	major
			5. Ceiling damaged/missing	minor
			6. Roof damaged/missing	minor
			7. Doors and windows damaged	minor
			8. Floor Slab / broken/cracks/split	minor
			9. Plaster/damaged/cracks/split	minor
			10. First Floor Failed /Collapsed	major
Concrete House Two Storey	 <p>CONCRETE HOUSE (TWO STOREY)</p>		1. Collapsed totally	totally
			2. Building Tilting sideways (right or left)	major
			3. Concrete/Timber columns /beams/ damaged/bent/cracks/tilt	major
			4. Concrete Hollow Block work/collapsed/tilt/cracks	major
			5. Ceiling collapsed (inside)	minor
			6. Roof damaged/missing	major
			7. Doors and windows damaged	minor
			8. Floor Slab / broken/cracks/split	minor
			9. Plaster/damaged/cracks/split	minor
			10. First Floor Failed /Collapsed	major

Yolanda showed us that the way we build houses needs to be stronger. These are 8 key messages on how to repair your house and build back safer.

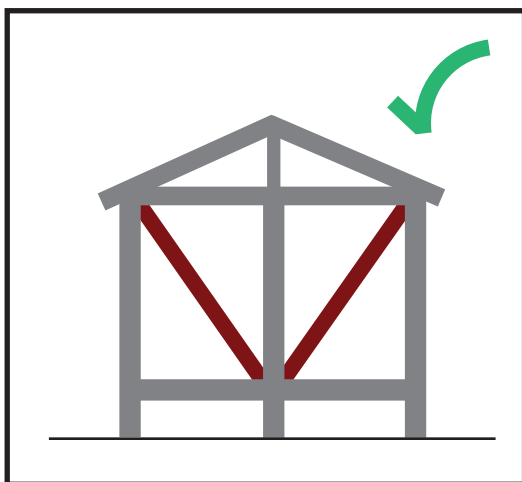
## 1 BUILD ON STRONG FOUNDATIONS



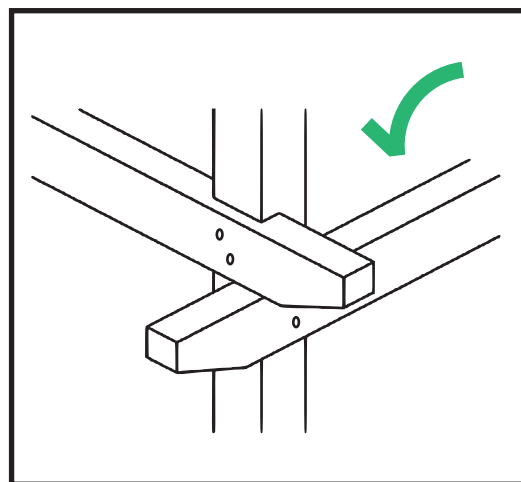
## 2 TIE-DOWN FROM BOTTOM UP



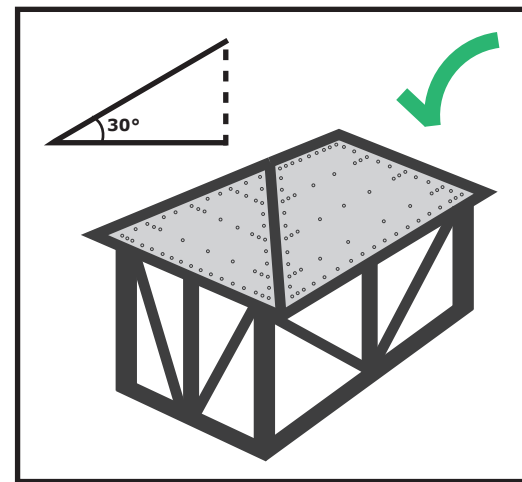
## 3 BRACE AGAINST THE STORM



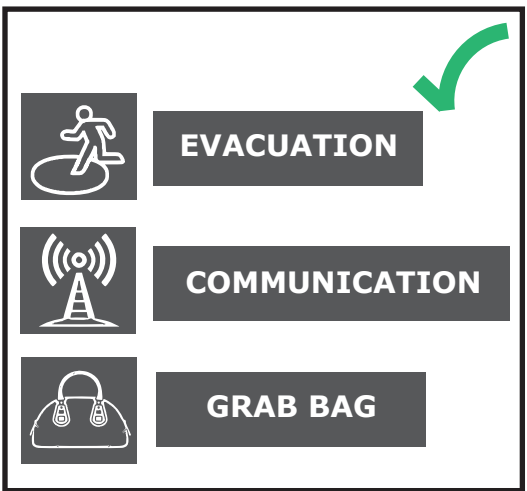
## 4 USE STRONG JOINTS



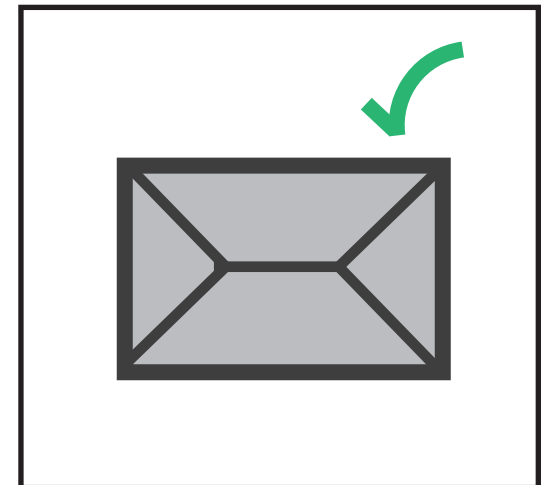
## 5 A GOOD HOUSE NEEDS A GOOD ROOF



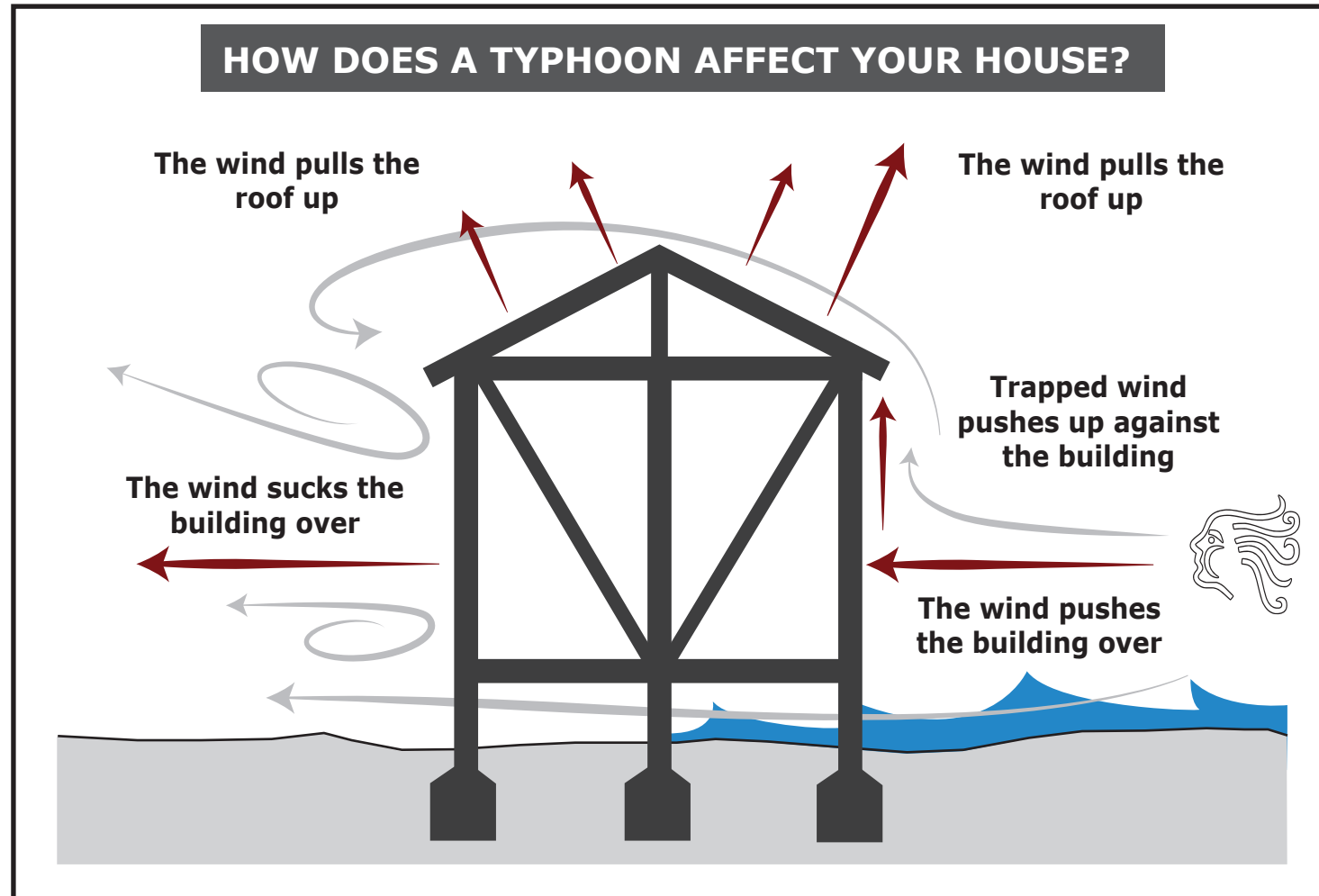
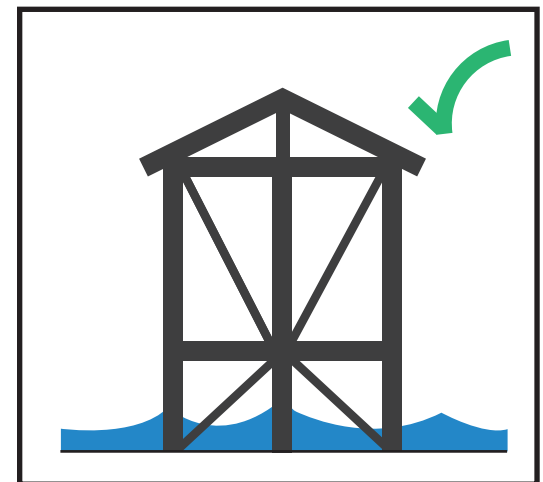
## 8 BE PREPARED



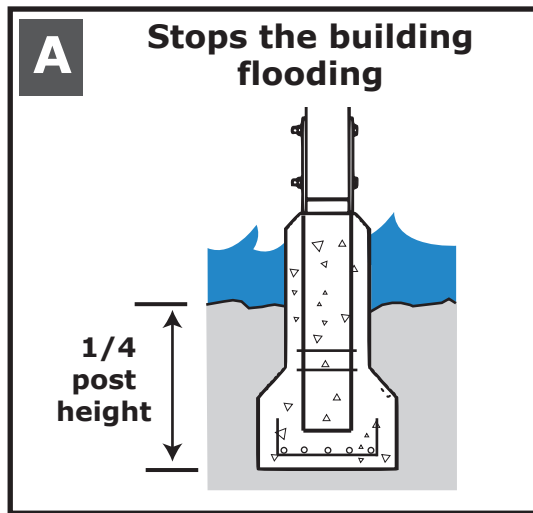
## 7 A SIMPLE SHAPE WILL KEEP YOU SAFE



## 6 SITE YOUR HOUSE SAFELY



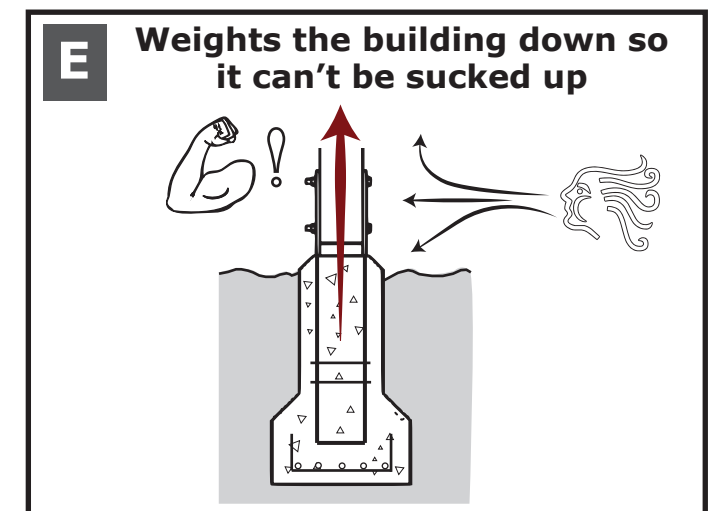
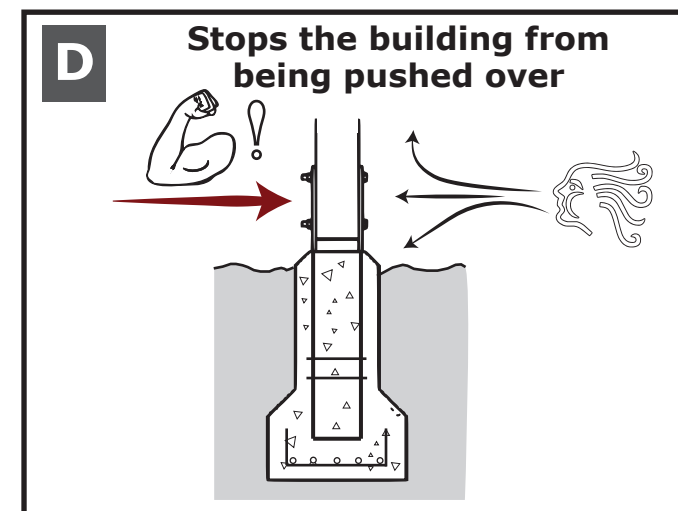
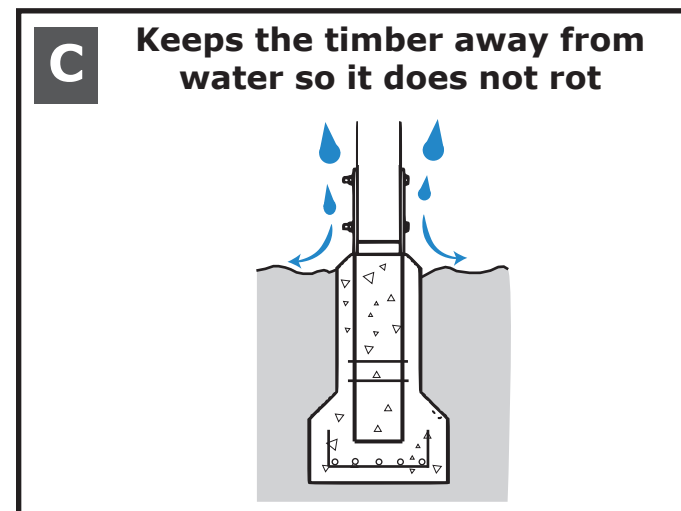
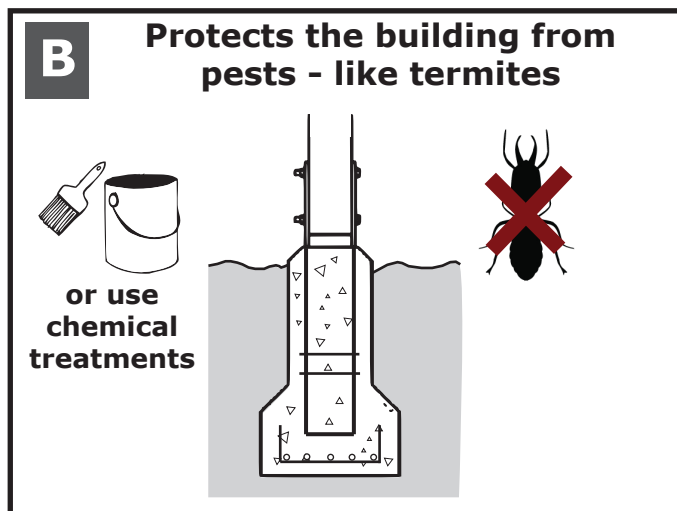
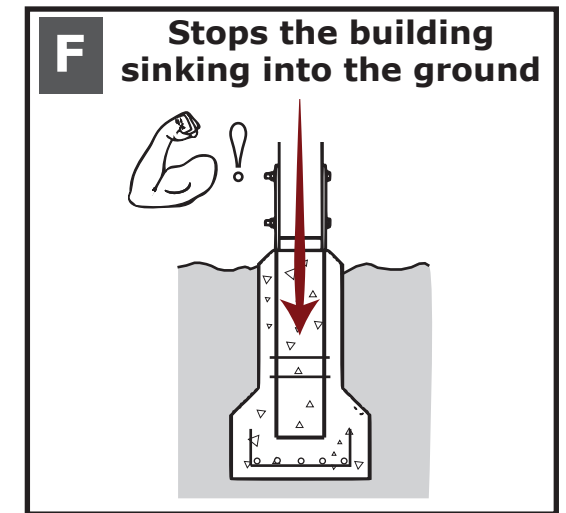




## Build on strong foundations

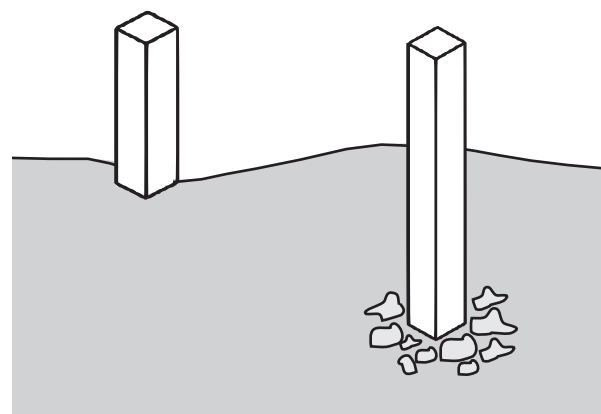


Foundations are very important as they anchor your house to the ground. Ensuring foundations are suitable to your building's location and ground conditions protect your house from strong winds, earthquakes and flooding.



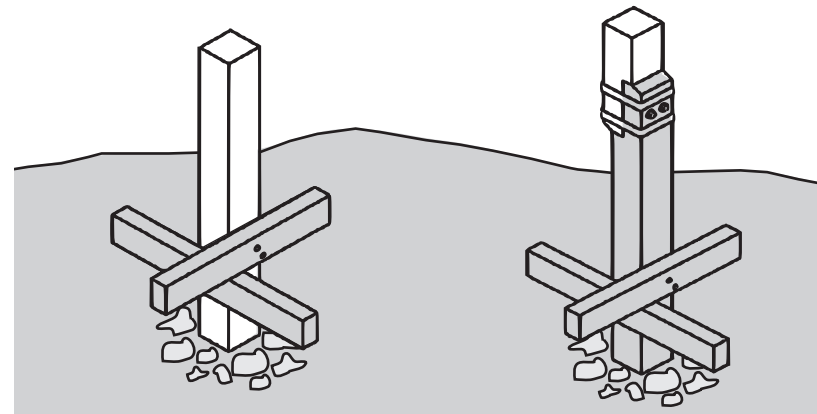
## WHAT CAN I USE AS A FOUNDATION FOR MY HOUSE?

Above ground timber post    Below ground timber post



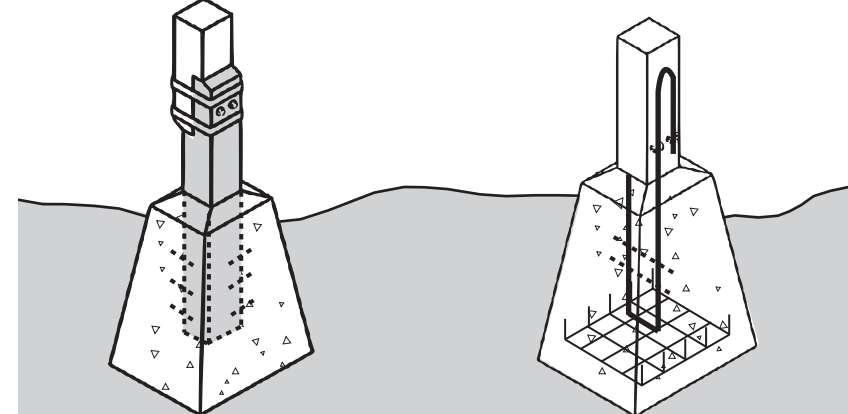
Too Weak

Anchors increase foundation strength    Treated hardwood post below ground protects from rotting



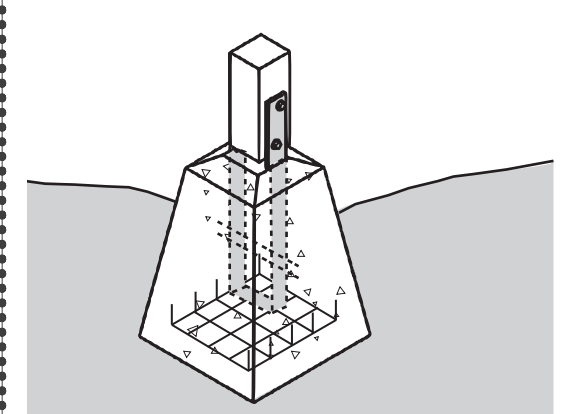
Strong

Hardwood post set into concrete foundation    Rebar set into concrete foundation



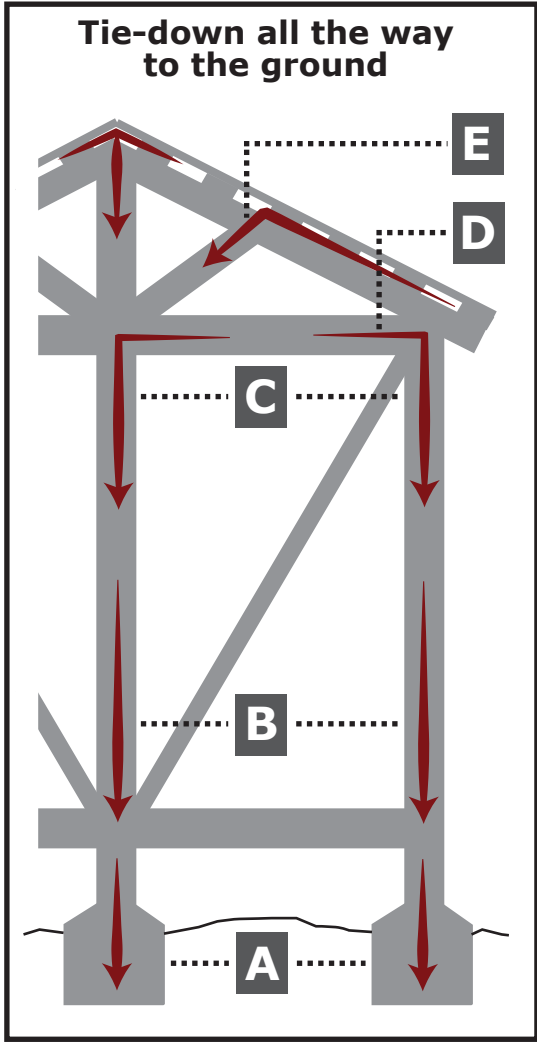
Stronger

Steel strap bolted to post with gap to avoid rotting



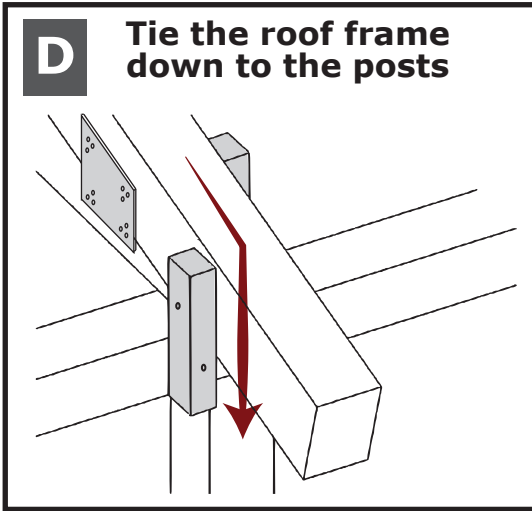
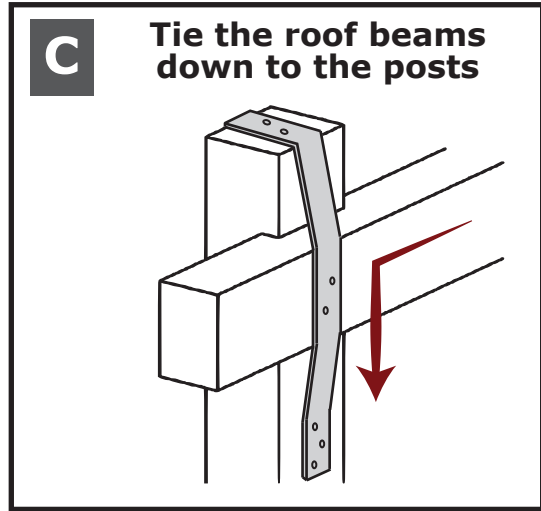
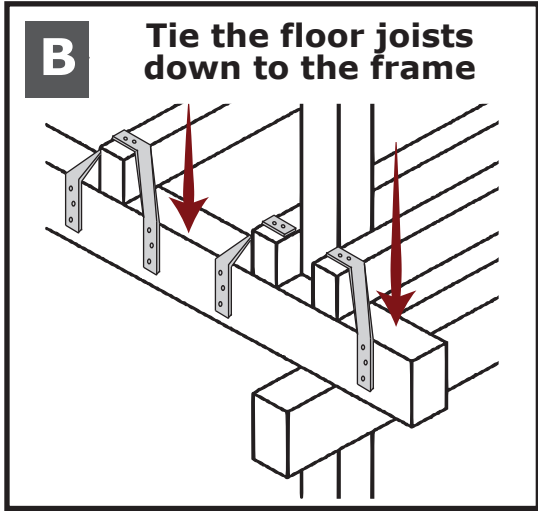
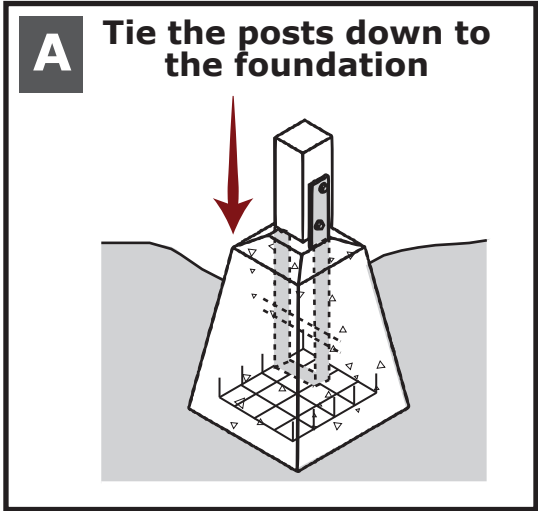
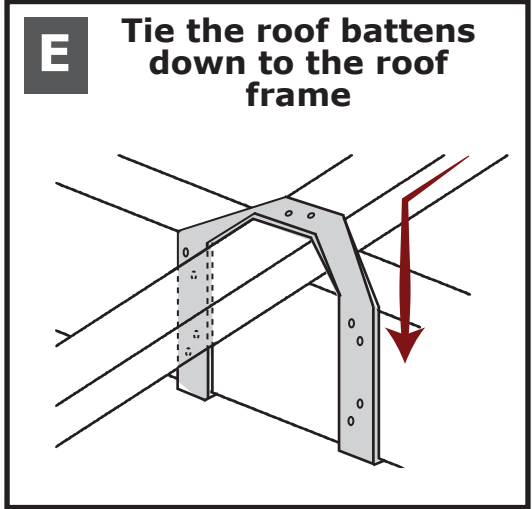
Strongest





**Tie-down from bottom up** ✓

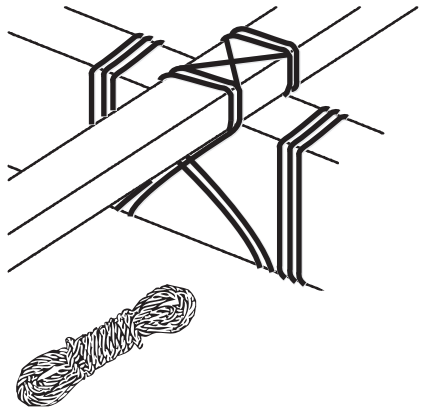
In a typhoon your house can be sucked apart or blown away by the wind. Tie every part of your building right through to the ground. Start thinking about this from the bottom up.



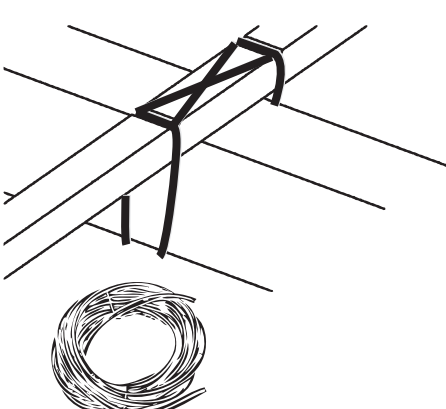
**WHAT CAN I USE TO TIE-DOWN MY HOUSE?**

**STRONG WINDS COMING?**

Rope or nylon fishing wire

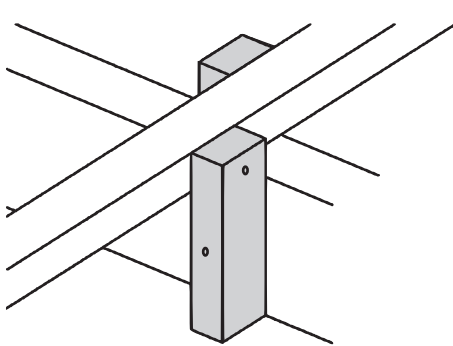


Thick galvanized wire (multiple layers)

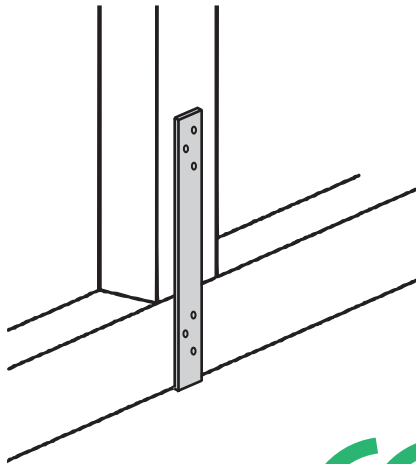


**Strong** ✓

Timber cleats

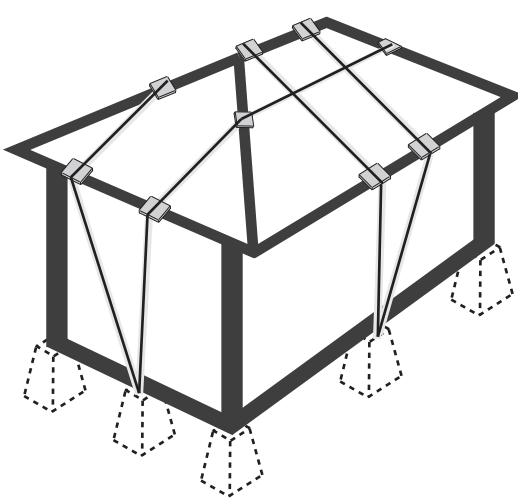


Galvanized metal strap



**Strongest** ✓✓

Tie-down when strong winds come



**A** Brace each wall

**B** Brace below the roof

**C** Brace between roof trusses or rafters

**D** When on stilts, brace between the posts

**E** Full bracing both ways from strong point to strong point!

**G** Brace around doors and windows - strong point to strong point!

**Brace against the storm**

Strong bracing stops your house being pushed over or pulled apart by the wind. Bracing needs to be strong against being crushed along its length or pulled apart. Brace between the strong points of your house.

**F** Brace at 45°. No less than 30° and more than 60°

**WHAT CAN I USE TO BRACE MY HOUSE?**

Tie thick galvanized steel wire

**Strong** ✓

Tie old rebar

**Stronger** ✓

Nail timber

Nail galvanized steel straps

Nail timber and galvanized steel straps

**Strongest** ✓✓

**A**

Extend timber past joints to stop nails splitting the timber

# Use strong joints

Your house is only as strong as the weakest joint. Build every joint so it can't be pushed or pulled apart. Horizontal nails are better as they can't be pulled apart by the wind sucking your house up or pulling it down.

**F**

Use gusset plates to strengthen joints

**B**

Don't cut away too much of the main posts or beams

**C**

Offset nails to prevent timber splitting

**D**

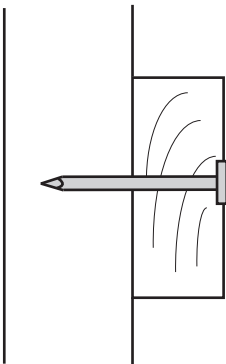
Nailing at an angle will make the joint harder to pull apart

**E**

Fishplate/strap vertical and horizontal joints to increase strength

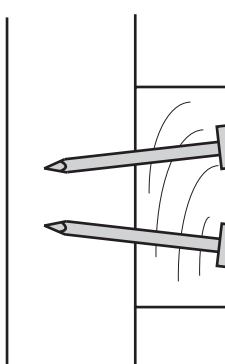
## WHAT CAN I USE TO STRENGTHEN JOINTS?

Single nail



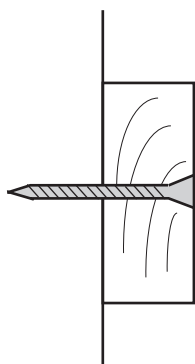
Too Weak

Nails

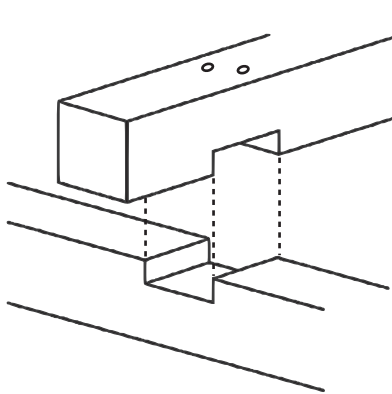


Strong

Screw

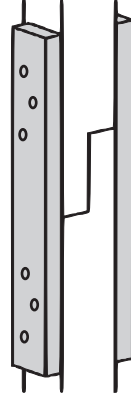


Interlock joint and nail

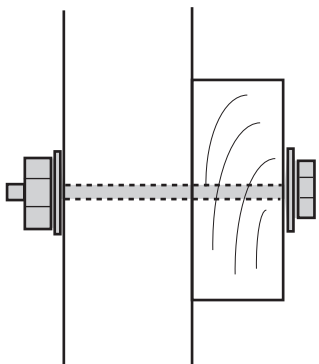


Stronger

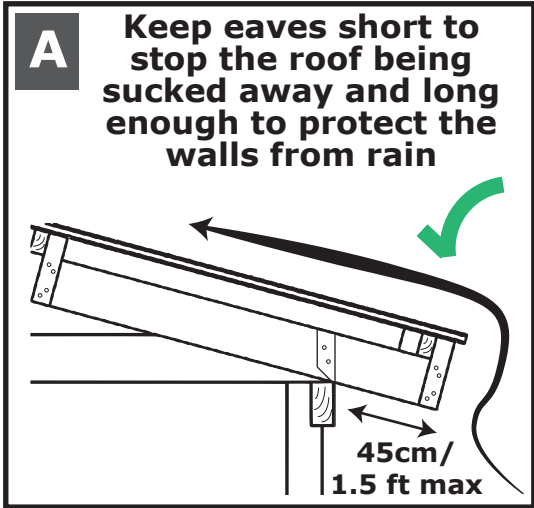
Fishplate or cleats



Bolt



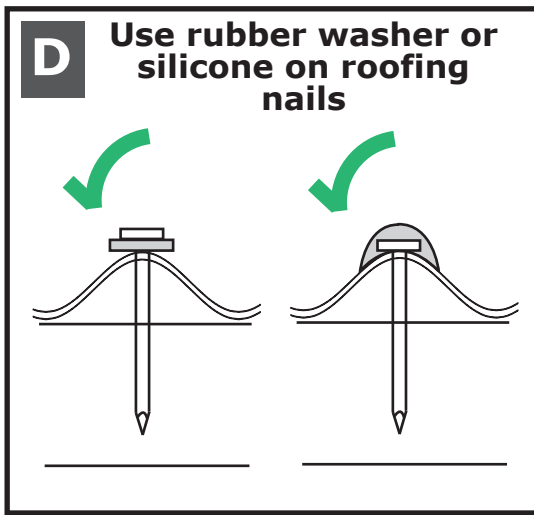
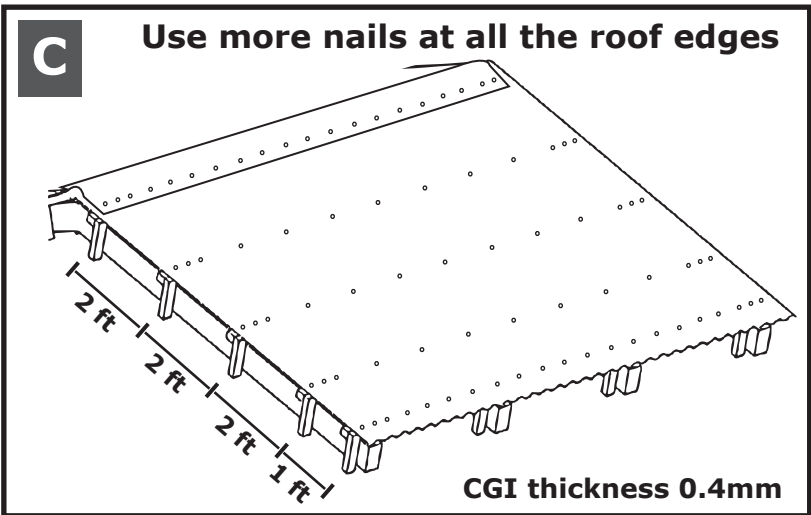
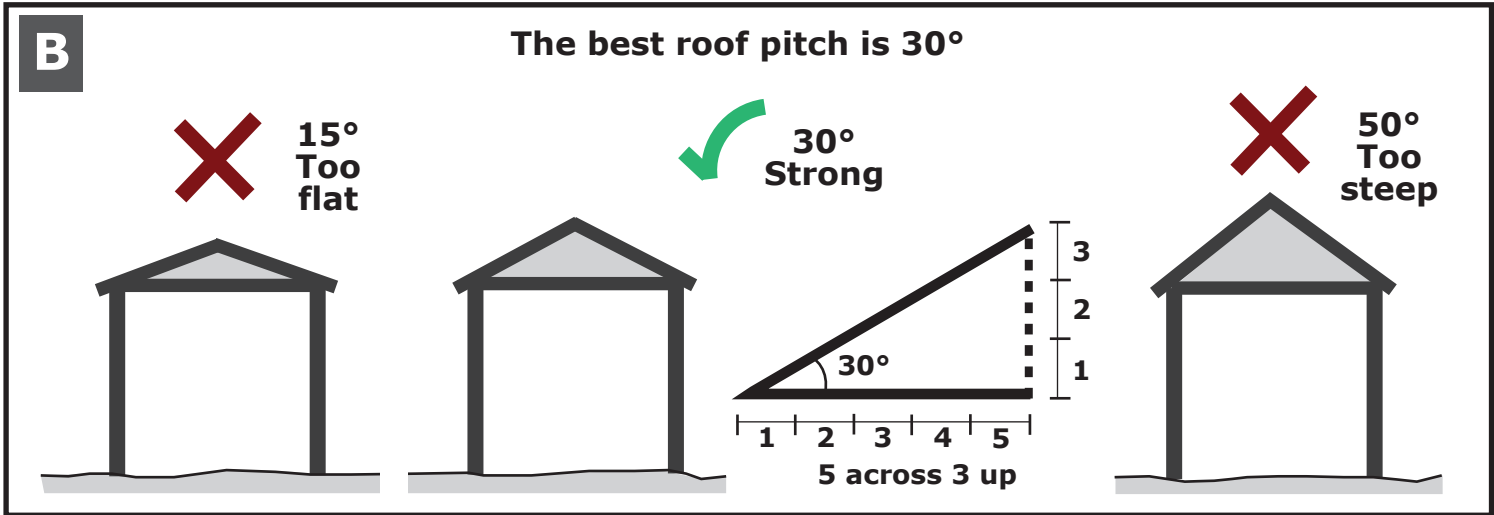
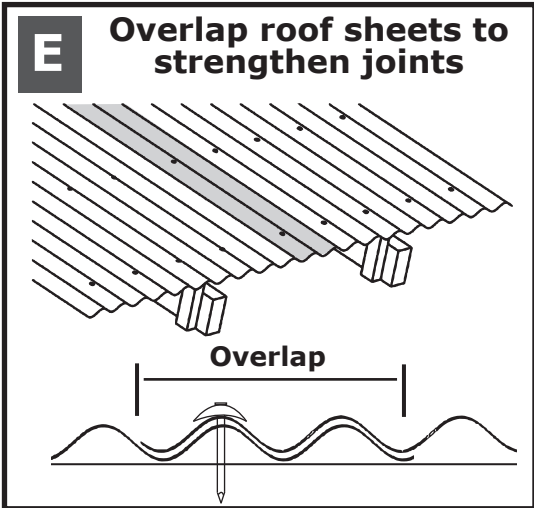
Strongest



# A good house needs a good roof

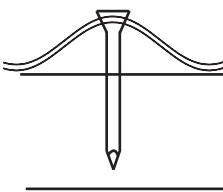
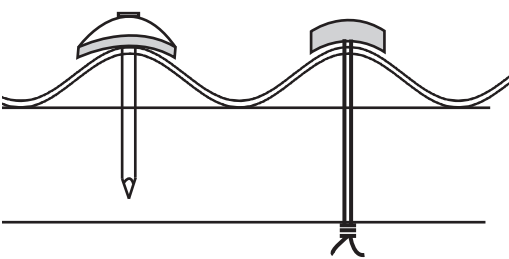
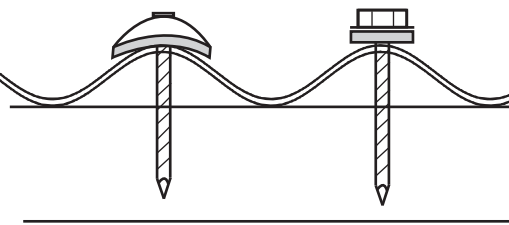
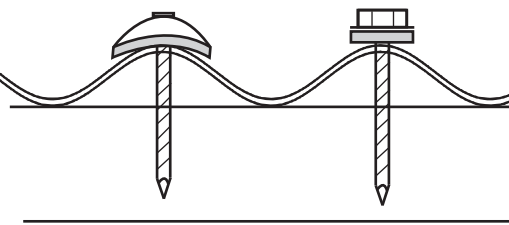
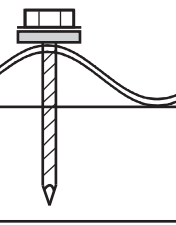






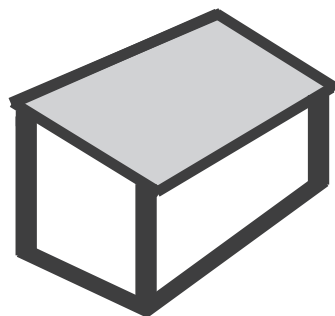
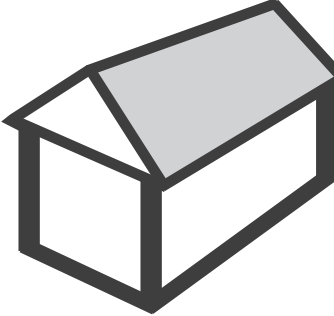
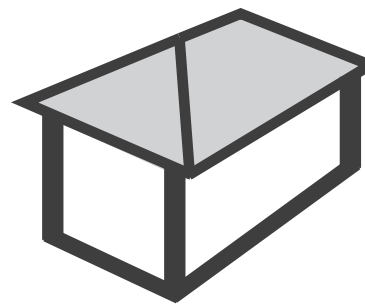




The way you design and build your roof is critical to protect you against strong winds and rain. Build your roof the right shape and pitch, and well nail down to protect against a storm.

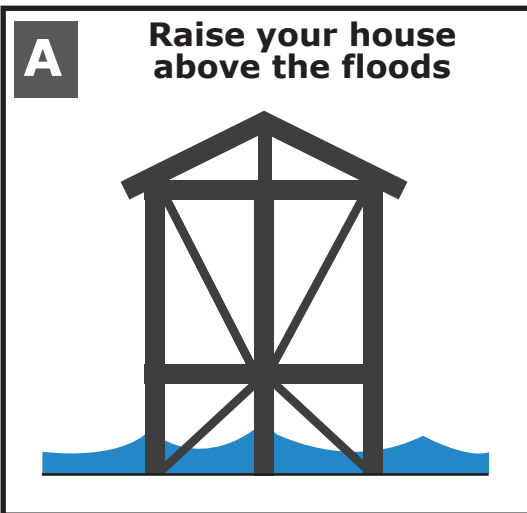


## WHAT CAN I USE TO SECURE MY ROOF?

## WHAT ROOF SHAPE SHOULD I USE?

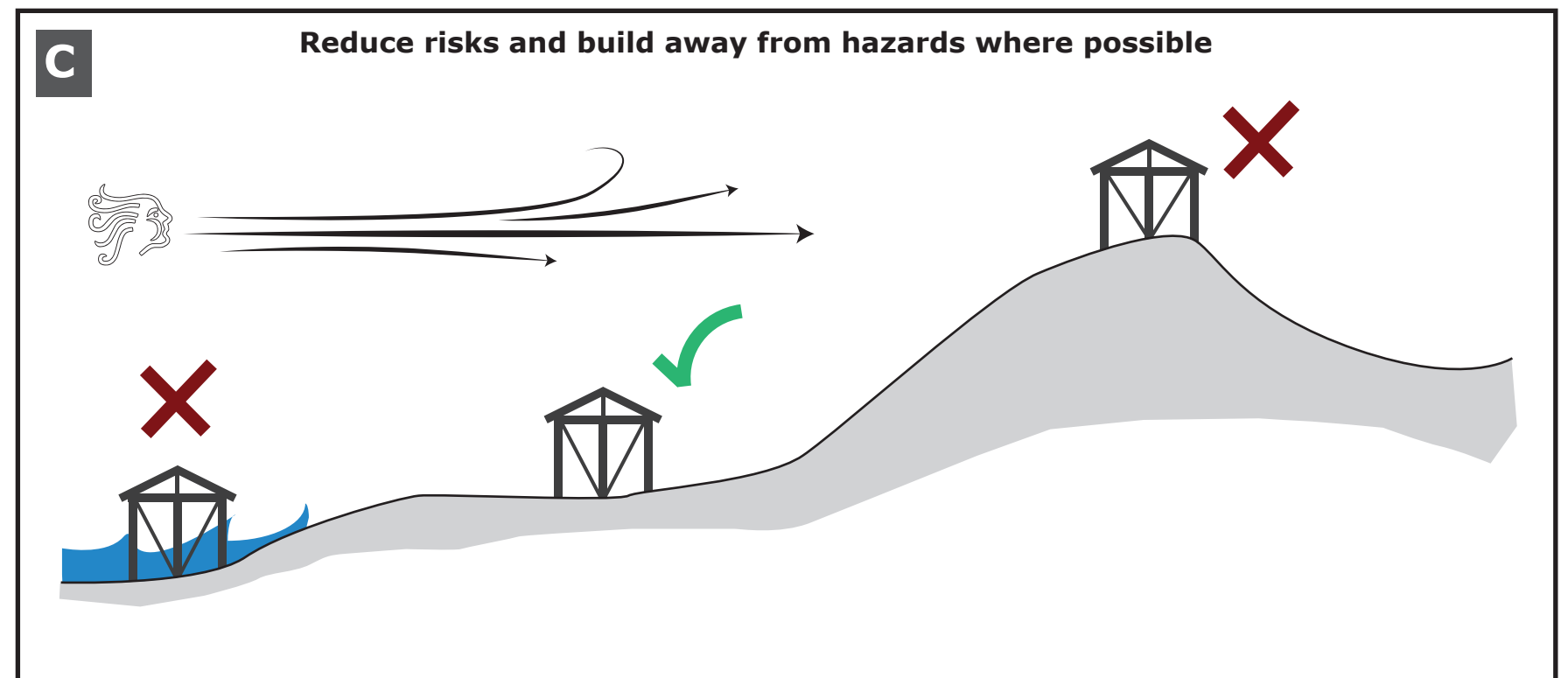
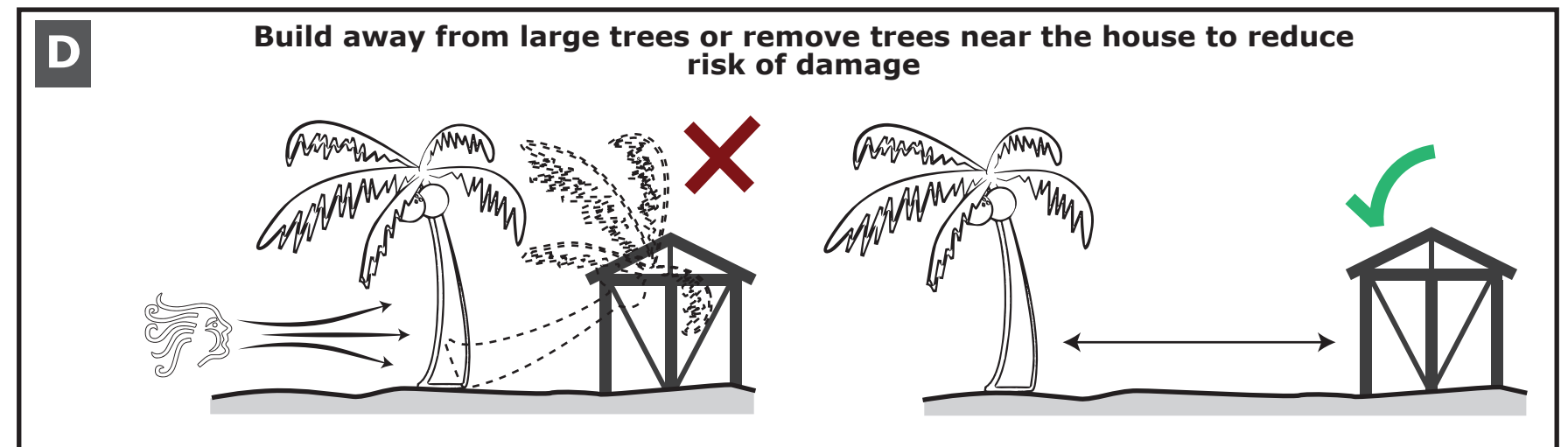
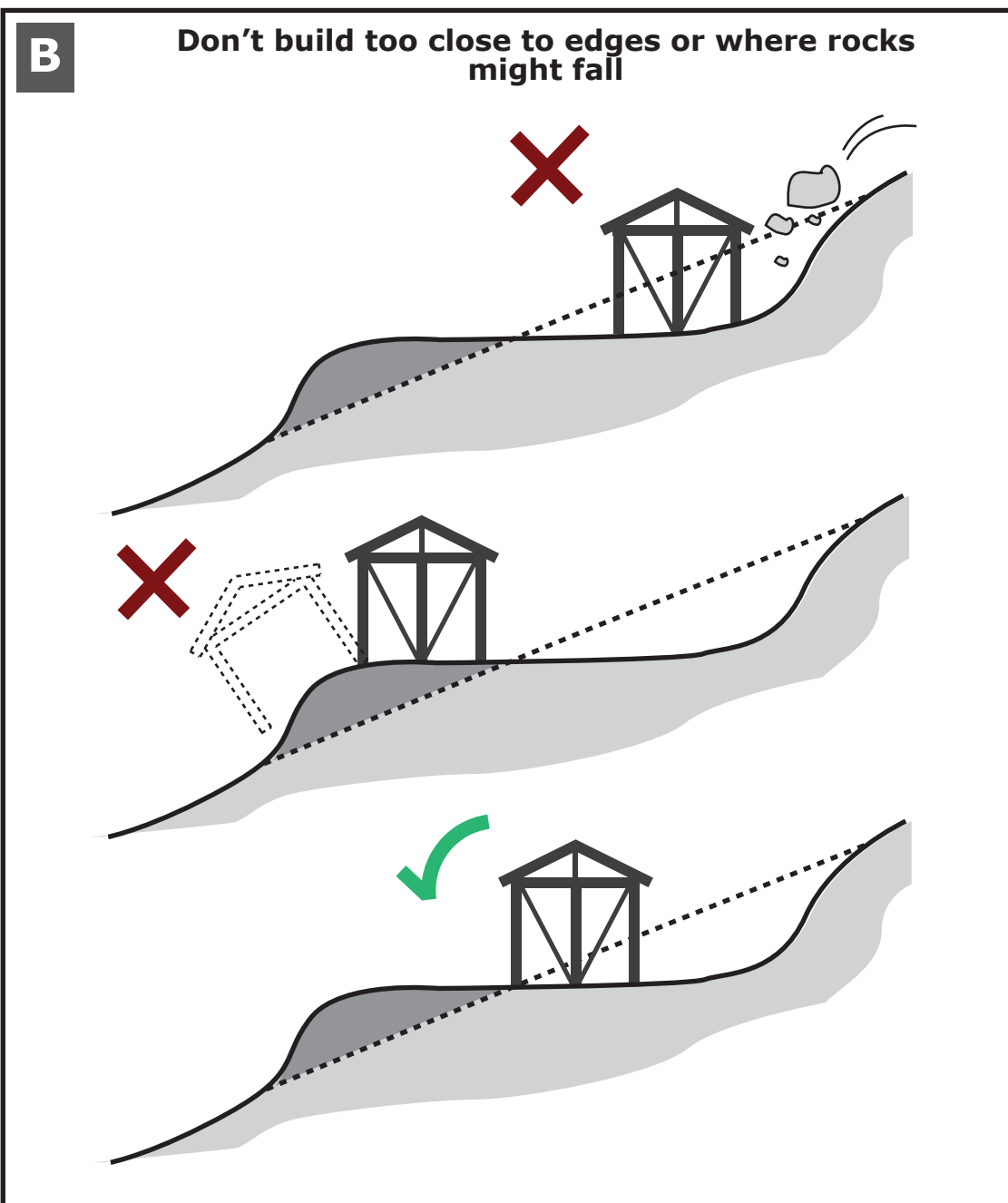
Regular nail	Umbrella head nail and washer	German wire (good for bamboo)	Twisted umbrella head nail and washer	Roofing screw and washer
				
Too Weak 	Strong 	Strongest  		

Single slope roof	Two sided gable roof	Multiple roof slopes reduce the risks of your roof being pulled apart
		
Too Weak 	Strong 	Strongest  




## Site your house safely ✓


Identify the hazards in your location and build as well as you can to resist them.



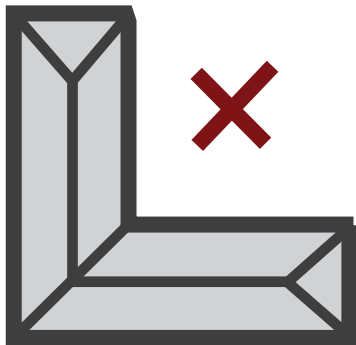


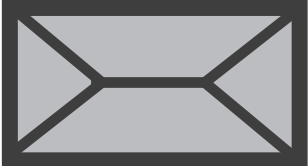
**A** Overhangs weaken the strength of your house






**B** Simple, compact shapes are the safest




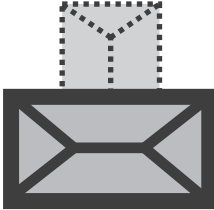




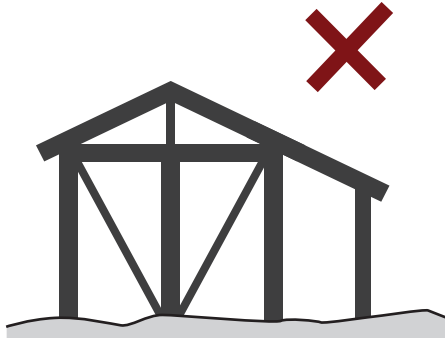
Length no more than three times the width


**C** Don't extend too long





**D** Lean to roofs separate to main roof

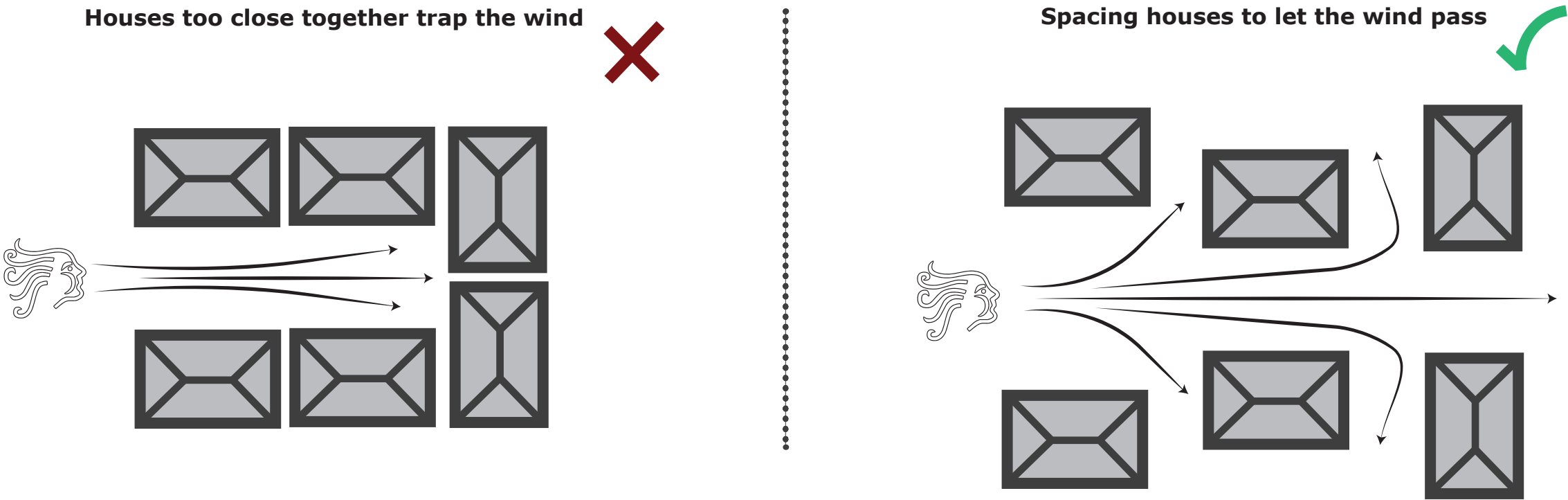




**A simple shape will keep you safe**

The shape of your house is important to reduce damage in strong winds. Always keep the design simple and strong.

HOW SHOULD WE PLAN A GROUP OF BUILDINGS?





HOW CAN I PREPARE MYSELF AND COMMUNITY FOR A DISASTER?



EVACUATION



- Make a plan and practice it
- Decide early if you will evacuate or stay in place
- Prepare safe evacuation route
- Know where the evacuation sites are
- Know what transport you can use



COMMUNICATION



- Know the disaster warnings signals
- Know how you can receive information about a disaster
- Inform your relatives and friends where you will evacuate to
- Know how you will communicate with relatives and friends after disaster
- Know how and who to inform of your situation after a disaster
- Know where to find information on missing persons



GRAB BAG



- Prepare a waterproof 'grab bag' prior to a disaster
- Make the 'grab bag' easy to carry and include:
  - medical kit
  - extra clothing and safe shoes
  - batteries
  - torch and matches
  - basic food
  - cooking equipment
  - basic tools
- important personal records/ID
- Don't forget some water

<b>Date:</b> [MM/DD/YYYY]	<b>Database ID:</b>	<b>Reviewed</b> <input type="checkbox"/>
<b>Completed by:</b>	<b>Team ID:</b>	<b>Enumerator ID:</b>

Hello, my name is \_\_\_\_\_ and I am collecting data for a consortium of local and international NGOs, organizations, UN and the Government.

I would like to ask you some questions about your household, the impact of Typhoon Yolanda on your living conditions and the assistance you have received. The purpose is to help the humanitarian community to understand how the response has been conducted and better plan and implement projects in the future.

The survey is confidential and any answers you provide will remain private. The questionnaire does not have "good" or "bad" answers. You do not have to answer if you do not want to. You may decline to answer any questions or stop the interview at any time. It will take around 20 minutes to complete. Do you agree to let me ask you these questions?

### A.0 PRELIMINARY INFORMATION

<b>A.0.1</b>	1.1.1	Province	1.1.2	Municipality
	1.1.3	Barangay		
<b>A.0.2</b>	Type of setting	<input type="checkbox"/> Rural	<input type="checkbox"/> Urban	
<b>A.0.3</b>	Is the household present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If no, skip to observations

### A.1 DEMOGRAPHICS

<b>A.1.1</b>	Respondent age	<input type="text"/>	Respondent gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female									
<b>A.1.2</b>	Please specify the ages and number of your <b>direct</b> household members													
	Under 1 yr		1-5 yrs		6-12 yrs		13-18 yrs		19-39 yrs		40-60 yrs		Over 60 yrs	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
<b>A.1.3</b>	Is this a single-headed household?			<input type="checkbox"/> Yes	<input type="checkbox"/> No									
	If yes, what is the gender of the household head?			<input type="checkbox"/> Male	<input type="checkbox"/> Female									
<b>A.1.4</b>	Are there any pregnant / lactating women in the household?				<input type="checkbox"/> Yes	<input type="checkbox"/> No								
<b>A.1.5</b>	Are there any people with physical disabilities in the HH?				<input type="checkbox"/> Yes	<input type="checkbox"/> No								
<b>A.1.6</b>	Are there any people with chronic illnesses in the HH?				<input type="checkbox"/> Yes	<input type="checkbox"/> No								
<b>A.1.7</b>	Are any separated/orphaned/unaccompanied children currently in the HH?				<input type="checkbox"/> Yes	<input type="checkbox"/> No								
<b>A.1.8</b>	Are there any members of an indigenous/native group in your HH?				<input type="checkbox"/> Yes	<input type="checkbox"/> No								

### A.2 HOUSING, LAND & PROPERTY

<b>A.2.1</b>	Are you living on your original site from before Yolanda?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>A.2.2</b>	If yes, were you displaced from this land immediately after the typhoon?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>A.2.3</b>	If no, are you currently living with a host family?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>A.2.4</b>	Do you plan to remain on this land?	<input type="checkbox"/> Yes	<input type="checkbox"/> No



A.2.5	What was your land tenure status before Yolanda?					Own house and lot		Own house, rent lot
		Rent house/room, including lot			Own house, rent-free lot with consent of owner			
		Own house, rent-free lot without consent of owner				Rent-free house and lot with consent of owner		
		Rent-free house and lot without consent of owner				Ancestral domain land		
A.2.6	What is your land tenure status now?					Own house and lot		Own house, rent lot
		Rent house/room, including lot			Own house, rent-free lot with consent of owner			
		Own house, rent-free lot without consent of owner				Rent-free house and lot with consent of owner		
		Rent-free house and lot without consent of owner				Ancestral domain land		
A.2.7	Is this location officially considered a "No Build Zone"?					Yes		No
<b>A.3 SHELTER DAMAGE</b>								
A.3.1	Was your house damaged during Yolanda?					Yes		No
A.3.2	Current damage to house				Totally Destroyed	Major damage	Partial damage	No damage
A.3.3	Current type of shelter			Emergency shelter		Makeshift shelter		Damaged house
		Partially repaired house		Completely repaired house		Evacuation centre		Bunkhouse
<b>A.4 SELF-RECOVERY</b>								
A.4.1	What do you plan to do with your current house?					Repair		Rebuild
						Nothing further		
A.4.2	If repair, have you started the process?			Complete		Ongoing - will complete with own resources		
				Ongoing - but requiring support			Not yet started	
A.4.3	If requiring support, what kind of support do you need?					Financial - we do not have livelihoods		
		Materials		Financial - we have gone into debt			Technical - we need help building a house	
		Labor		Other				
A.4.4	If rebuild, have you started the process?			Complete		Ongoing - will complete with own resources		
				Ongoing - but requiring support			Not yet started	
A.4.5	If requiring support, what kind of support do you need?					Financial - we do not have livelihoods		
		Materials		Financial - we have gone into debt			Technical - we need help building a house	
		Labor		Other				
A.4.6	If facing potential relocation, why?				Required government relocation			
		Self-motivated relocation			Other			

A.5 SHELTER ADEQUACY & SAFETY													
A.5.1		Does the dwelling have any of the following safety features that follow the Shelter Cluster technical specifications?											
		Site	<input type="checkbox"/>	Poor	<input type="checkbox"/>	Good							
		Shape	<input type="checkbox"/>	Poor	<input type="checkbox"/>	Good							
		Foundation	<input type="checkbox"/>	None	<input type="checkbox"/>	Poor	<input type="checkbox"/>	Okay	<input type="checkbox"/>	Good			
		Tie-down	<input type="checkbox"/>	None	<input type="checkbox"/>	Poor	<input type="checkbox"/>	Okay	<input type="checkbox"/>	Good			
		Bracing	<input type="checkbox"/>	None	<input type="checkbox"/>	Poor	<input type="checkbox"/>	Okay	<input type="checkbox"/>	Good			
		Strong joints	<input type="checkbox"/>	None	<input type="checkbox"/>	Poor	<input type="checkbox"/>	Okay	<input type="checkbox"/>	Good			
		Roofing	<input type="checkbox"/>	None	<input type="checkbox"/>	Poor	<input type="checkbox"/>	Okay	<input type="checkbox"/>	Good			
A.5.2		Does the dwelling have any of the following adequacy features that follow the Shelter Cluster technical specifications?											
		Space	<input type="checkbox"/>	Less than 18m2	<input type="checkbox"/>	More than 18m2							
		Durability	<input type="checkbox"/>	Less than 2 years	<input type="checkbox"/>	More than 2 years							
		Drainage	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No							
		Ventilation	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No							
		Ceiling height	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No							
		Privacy	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No							
		Security	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No							
		Accessibility	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No							
B.1 ACCESS													
B.1.1		Which is your primary source of drinking water?					<input type="checkbox"/>	Piped water	<input type="checkbox"/>	Tube well with hand pump			
		<input type="checkbox"/>	Open well	<input type="checkbox"/>	Spring	<input type="checkbox"/>	Purchase	<input type="checkbox"/>	Tank	<input type="checkbox"/>	Other		
B.1.2		At home, do you treat the water before drinking (e.g. boiling, disinfectant)?						<input type="checkbox"/>	Yes	<input type="checkbox"/>	No		
B.1.3		Do you currently have access to a toilet?			<input type="checkbox"/>	Communal	<input type="checkbox"/>	Private	<input type="checkbox"/>	None			
B.1.4		Do you feel that your toilet provides adequate privacy?					<input type="checkbox"/>	Yes	<input type="checkbox"/>	No			
B.1.5		Do you have access to bathing facilities?					<input type="checkbox"/>	Yes	<input type="checkbox"/>	No			
B.1.6		Do you feel that your bathing facilities provide adequate privacy?					<input type="checkbox"/>	Yes	<input type="checkbox"/>	No			
B.1.7		Do you have access to culturally appropriate food storage, preparation and cooking facilities?							<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	
B.1.8		Do you have access to existing or new livelihood opportunities?					<input type="checkbox"/>	Yes	<input type="checkbox"/>	No			
B.1.9		Do you have access to communal facilities such as health care facilities, schools, government offices and public transport?											
							<input type="checkbox"/>	Yes	<input type="checkbox"/>	No			
C.1 INCOME PROFILE													
C.1.1		Does your current household income cover the family's basic needs?											
		Completely		Sufficiently		Partially		Not at all					
		Before	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
		Now	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
C.1.2		If "Partially" or "Not at all," how are you covering your family's basic needs?											
		<input type="checkbox"/>	Sale of household assets			<input type="checkbox"/>	Seek employment opportunities in a new location			<input type="checkbox"/>	Seek new job in same location		
		<input type="checkbox"/>	Borrow from friends / family			<input type="checkbox"/>	Borrow from informal source			<input type="checkbox"/>	Borrow from formal source		
		<input type="checkbox"/>	Other (specify)			<input type="checkbox"/>	Humanitarian assistance						
C.1.3		Is your household a 4p beneficiary?						<input type="checkbox"/>	Yes	<input type="checkbox"/>	No		

D.1 ASSISTANCE RECEIVED & PRIORITIES													
D.1.1	Has anyone in your household received any shelter assistance?								Yes		No		
D.1.2	If yes, what kind of assistance have you received?								Emergency shelter			Temporary shelter	
			Host family support		Rental support		Bunkhouse		Permanent housing				
			Core house		Materials								
D.1.3	Who provided your assistance?								Neighbors/Friends/Family/Yourself				
			International Org			Local Org		Remittances		DSWD/NHA		Don't know	
D.1.4	How satisfied were you with the assistance you received?												
			Very satisfied			Satisfied		Somewhat satisfied			Not satisfied		
D.1.5	What are your priorities for the future?												
		Housing					Relocation						
		Clearance of debt					Children's education						
		Restored livelihood/job					Other						
D.1.6	Can you name three things you would do to prepare for the next disaster?								Yes		No		Don't know
E.0 OBSERVATIONS (if household not present)													
E.0.1	Current damage to house		Totally Destroyed		Major damage		Partial damage		No damage				
E.0.2	Current type of shelter			Emergency shelter			Makeshift shelter			Damaged house			
		Partially repaired house		Completely repaired house			Evacuation centre			Bunkhouse			

## Annex D – Population Extrapolation Calculations

According to a DROMIC report from March 2014, 1,012,790 households were estimated to have been damaged or destroyed as a result of Typhoon Haiyan. Using the 96% damage figure from the initial Shelter Cluster assessment would then elicit a total household population within the 50 kilometre storm path zone of 1,053,302.

- Total damaged or destroyed houses in 50 kilometre typhoon corridor (DROMIC): **1,012,790**
- Percentage of damaged or destroyed households in 50 kilometre typhoon corridor (Shelter Cluster/REACH initial assessment): **96%**
- Calculation of total household population in the 50 kilometre typhoon corridor (Shelter Cluster/REACH): **1,053,302**
  - $(100\% + 4\%) \times 1,012,790 = 1,053,302$  (*Number of households damaged or destroyed multiplied by the extrapolation factor of 104%, as the total number of damaged or destroyed houses is only 96% of the total household population according to the initial Shelter Cluster needs assessment.*)