

Version 6.0: 13 January 2014
Typhoon Haiyan – Region 8
Supporting Self Recovery Shelter Repair Package Guidance

Introduction:

The following is compliant with the full Typhoon Haiyan Shelter Cluster technical guidelines at 09 December 2013 available here:

<https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Pages/default.aspx>

Many agencies aim to procure items for their recovery shelter interventions while undertaking their emergency shelter interventions. Given the number of families affected many agencies are looking to provide a supporting self recovery shelter repair package for those with Damaged Homes which may include more durable materials (such as CGI sheet), tools, cash or vouchers and technical assistance. The guidelines are set out here in terms of Material and Technical assistances.

Assistance Guideline:

Shelter repair kit		Value (PHP) (note1)
Materials distribution or Cash/voucher	CGI sheets – 0.4-0.5mm thickness (note 2)	5,000 to 10,000
	Plywood -18mm thick	
	Timber - certified timber, various sizes	
	Coconut wood - certified timber, various size	
	Fixings – rope, nails, etc. (see fixings table above)	
	Tools – saw, claw hammer, shovel, pliers, etc (see specifications from community tool kit in technical guidelines)	
Technical Assistance	Training, technical guidance, monitoring	Additional 10-20% on top of material support value

Only the minimum gauge of CGI sheet and the value envelope has been defined by the shelter cluster.

Notes:

*1 The envelope of assistance has been defined to align with DSWDs proposed package of assistance **which is still being agreed at national level**, but at 10 Dec 2013 is believed to offer 10,000 PHP equivalent (in-kind material, tool and potentially some cash support) for those with partially damaged houses and 30,000 PHP equivalent for those with totally damaged houses. The materials in kind and/or cash grant would be received after a process of assessment and verification which may last a number of months. It is believed at the 10 Dec 2013 that other than for emergency shelter assistance, if a household receives shelter recovery assistance from any organisation the government will, where possible, “top-up” the assistance to the same level as the DSWD assistance for partially or totally damaged houses. **It is therefore important that agencies register the exact household and value of assistance given and pass this information to the DSWD at the municiple level. They should also hand to the householder a certificate indicating the value of shelter assistance received.**

*2 Cluster's original recommended CGI of 26ga SWG corresponds to 0.457mm or 0.018 Inches as detailed in BS 3737:1964. However, local/national producers seem to only produce them at 0.4mm or 0.5mm, this range is now recommended as acceptable. However, it is important to measure with calipers when ordering in the Philippines that sheets are at the very least 0.4mm as actual thickness may vary. Where possible, 0.5mm sheets should be aimed for.

Further Guidance - Hardware:

As stated the shelter cluster is only defining the minimum thickness of CGI sheet and the value envelope of the package. However, the following has been provided as an example to support agency's program planning and procurement. Prices are an estimate from response to Bohol and may have increased.

Note	Description/Item	Unit	Unit Price [PHP]	Qty / household	Cost/ household [PHP]	Unit Price [USD]	Cost/ household [USD]
	Canvas Bag for Packing all but CGI.	Piece	60	1	60	1.43	1.43
3	CGI Sheet, 8ft, 0.4-0.5mm thickness, galvanized steel, painted. Refer to cluster's technical guidelines for further specification.	Piece	220	16	3520	5.24	83.81
4	Umbrella nails, for roofing sheets, twisted, galvanized, 75mm, including watertight washer. Shank diameter 3.4 to 3.8mm, head diameter >18mm. Refer to attached further specification guidance.	Kg	90	4	360	2.14	8.57
5	Nail, iron, for wood, 70mm to 100mm, shank diameter 3.8 to 5mm, head diameter 7.8 to 10mm. Refer to attached further specification guidance.	Kg	65	4	260	1.55	6.19
5	Nail, iron, for wood, length 40mm to 75mm, shank diameter 3 to 3.8mm, head diameter 6.8 to 7.6mm. Refer to attached further specification guidance.	Kg	65	2	130	1.55	3.10
5	Nail, iron, for wood, 40mm, shank diameter 2.2 to 2.8mm, head diameter >8mm. Refer to attached further specification guidance.	Kg	65	1	65	1.55	1.55
	Tie wire, galvanized, diameter 2.0 mm, roll of 25m	Roll	80	1	80	1.90	1.90
	Metal strapping, galvanized, 5cm wide, 16 gauge, Simpson Strong-Tie CS16 or approved equivalent. Roll of 10m.	Roll	1050	1	1050	25.00	25.00
	Elastomere sealing material, Vulca seal or approved equivalent, can of 500mL (or 1pint)	piece	105.42	1	105.42	2.51	2.51
KIT TOTAL					5630.42 PHP		131.55 USD

Other Items (no less important than those above):

- Cash and Vouchers - in addition for purchase of other or additional materials specific to the house and/or hiring of skilled labour.
- Plain galvanised steel sheet 26 guage (used for the ridge capping)
- Lumber - “Good” Lumber, and Coco lumber
- Marine plywood
- Cement bags (for foundations and to allow repair of latrine)
- Tools per household (claw hammer, 450mm long timber saw, tin snips, nail punch), needs to be assessed according to target area
- Some community tools: spades, hoes, shovels, digging bar, crowbar, measuring tape, wheel barrow

Notes:

*3 16 no. 8ft CGI sheets per household had been suggested based on coverage of a 18m² house. However, agencies are proposing to assess house by house, and therefore this represents a suggested average for procurement purposes only.

*4 It is important to increase the number of umbrella nails with washers to reduce roof failure in future events. Based on provision of purlins at 2ft spacing maximum and increased fixings (1 per corrugation) at edges, gives a need for 35 nails per sheet. 35 umbrella nails approximately weighs 250grams, hence 4kg.

*5 Ring shank nails should be considered if available. The number of nails to be provided to each household is high because significantly more bracing is to be encouraged.

Further guidance on specifications:

CORRUGATED GALVANISED IRON SHEETS

Dimensions: Length 8ft, 0.4-0.5mm thickness, width 2ft 9inch (usable 2ft 6 inch)
Metric : length 2.44m, thickness 0.457mm, width 0.92m (usable 0.84m)

Tensile strength: 300N/mm²

Coating : Coating: hot dip galvanization with minimum 120g/m² aluminium-zinc on each side that is 240g/m² total coating weight.

Hardness 85 HRB minimum

NAILS

For all types of nails: Iron nails, made of carbon steel, cold processed, not heat treated except for galvanisation.
Hot dip galvanised at 300g/m² +/-10%, or uncoated, as per contract.
Minimum tensile strength 650N/mm²
With flat smooth circular heads, plain shanks and diamond points. Minimum head diameter to be the double of the shank diameter.

In addition, for roof nails only:

Long pitch square twisted or spiral rolled shank. Spring-head type, with sealed umbrella type steel washer + rubber washer. Hot dip galvanised at 300g/m² +/- 10%.
Rubber washer minimum 22mm diameter.

Significant thanks must go to Save the Children and Catholic Relief Services for use of the above lists and draft specifications.

Note that the above specifications and BoQ are for guidelines only, agencies should also carry out their own assessments and market evaluation.

Guideline for Technical Assistance:

Inclusion of technical assistance in the supporting self-recovery package is essential to maximise the effectiveness of this package.

As a minimum guideline, agencies should budget to spend a minimum of 10% - 20% on top of their hardware budget (material costs for delivered in-country) in software.

This software should include several of the following:

- Orientation sessions with communities
- Information, Education and Communication (IEC) material, with posters and leaflets showing people suggestions on how to build back safer. The following page has IEC material relating to building back safer.

<https://www.sheltercluster.org/Asia/Philippines/Typhoon%20Haiyan%202013/Pages/default.aspx>

- Training for beneficiaries in building back safer (e.g. bracing, good practice on roof fixing etc.)
- Training for carpenters and masons
- Provision of skilled labour (carpenters and masons) who have knowledge of disaster risk reduction techniques.
- Technical supervision (offering advice on shelter disaster risk reduction to beneficiaries)
- Regular monitoring to ensure resources are being used to maximum efficiency and to appropriately reduce vulnerability to future disasters
- Feedback mechanisms are incorporated in programmes.

Urban vs. Rural package differences:

Discussion was had within the Tacloban based TWIG regarding this issue and it was agreed that in urban areas, the target groups that agencies were most likely to still work with previously had timber truss roof structures with CGI sheets or some sort of profiled metal roofing and therefore even if the house had masonry walls the package described in this document was still relevant. Nevertheless, agencies may want to consider supporting families with structural assessments to be followed by retrofitting recommendations and additional material support.

Specific WASH Guidance:

It is understood that approximately 70%¹ of households had access to improved latrines in region 8. Initial assessments from cluster partners had shown that although most affected households have partially or totally damaged toilets², in most cases the substructure remain intact. These may need cleaning, and minor repair to the concrete slab surround for example.

Agencies will need to assess on a house-by-house basis what WASH support will be needed. Some agencies are proposing an additional lump sum payment to assist households repair their toilets.

In general support for rebuilding the latrines should be part of shelter programs or an integrated recovery programme being proposed by an agency. Where agencies do not have capacity to assist households with repair of toilets they should highlight this with the WASH Cluster and partner where appropriate.

For further information on this annex please contact tech.phil@sheltercluster.org

¹ JMP figures will provide more precise data

² Sometimes known as comfort rooms (CRs)