

Transitional Shelter Option for Haiti: 6-month emergency "JAS Shelter" (Just Add Sticks)

Executive Summary:

- Shelter needs and parameters have been defined in concert by the Government of Haiti (GoH) and the Emergency Shelter Cluster (ESC).
- Phases for shelter are: Emergency (6-month), Transitional (3-5 years) and Permanent
- World Shelters offers as **open source information** and with supply lines available a 6month shelter design using the relief sheeting (e.g. 4m x 6m as roof) that conforms to expressed performance needs for a contextually-adaptable frame for covering by relief sheeting, CGI or other local material.
  - The JAS Shelter system is a low-cost universal connector system for a truss-frame 18 m2 family shelter that can utilize any available poles, lumber or sticks.
  - WS recommends split bamboo as the most economical pole material for the sixmonth target lifetime of these shelters. Initial covering can be "relief sheeting".
  - Paid local labor is included in the project budget
  - Extremely rapid and high volume construction has been planned and is achievable. The pipeline of materials supplies is confirmed.
  - Materials used in JAS have transitional capability for use in the 3-5 year shelter.
  - With the rainy season approaching JAS offers a low-cost rapid-deployment locally-built solution for providing conforming shelter capable of making it through the rains with the ability to transition into longer-term shelter.
  - World Shelters' pilot project of 200 each 18 m2 JAS Shelters has a total budget of \$120,000 built complete. <u>Costs will reduce below \$250 each (built complete) in</u> <u>larger scale and with the relief sheeting provided by partner agencies.</u>
- The easy to assemble structure can be assembled by four un-skilled workers in 6 hours including relief sheeting for ceiling and walls.
- World Shelters has a resource of over 500 volunteers prepared to assist in Haiti.

World Shelters is an NGO - US non-profit 501(c)(3)

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### Haiti: Relief, Rebuilding and Recovery

## JAS Shelter for "6-month" 18 m<sup>2</sup> Emergency/Transitional Shelter

#### Contextually adaptable frame connector system to meet the expressed need for a rapid, lowcost "6-month" shelter frame to cover with relief sheeting and CGI.

#### **Benefits:**

- Very low price point
- Cost includes capital spent in the afflicted region
- Standard kit provides 18 m<sup>2</sup> of shelter for family of five
- Connector kits are universal, for use with any "sticks", plus roofing and wall membranes, e.g. galvanized steel roofing or relief plastic sheeting material.
- JAS connectors with zip-ties and self drilling screws join the bamboo to build the structure.



- Incorporate regionally available bamboo or wood. For Haiti, we recommend using dry preserved split bamboo from Caribbean.
- Simple assembly of familiar "3-4-5" truss-roof frame; modular design allows multiple sizes.
- Engineered to withstand 75mph wind and heavy rain
- Initial roof and wall covering of relief sheeting; then support CGI roofing.
- Transitional shelter programming includes cash for paid local labor and materials, e.g. locally appropriate wall materials, contributing to revitalization of the local economy through progressive adaptations of materials used in JAS for transitional shelter and permanent house.









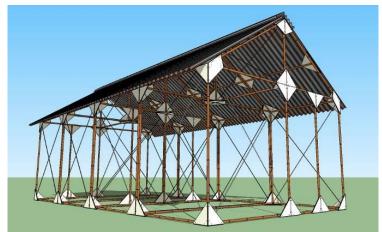






#### JAS Kit Includes:

- Set of corrugated polypropylene connectors (5 mm), with double fold on bias for reinforced strength
- Zip ties, 125# rated
- Self-drilling screws
- Polyester cord 1/8" (500 ft.)
- Clips for fixing sheeting to frame
- Graphical instructions
- Hand tools
- Ground anchors
- Shipping box .5m x .5m x .3m; shipping weight 12 kg





# JAS Shelter Complete (for Haiti) Also Includes:

- Set of split bamboo "sticks" to build the complete shelter
- Sheeting material ("relief sheeting") for initial roof and wall membrane





