What we do.....

Technical Support & Consultancy

Practical Work Experience & Training

Practical Research & Development

Timber Construction Research Project
Technical Background

Open Panel Timber Frame

OPTF has a structural frame of timber sheathed with a sheet material such as Orientated Stranded Board (OSB), Plywood, to provide bracing.

- Reduced Construction Time
- Reduced waste
- De-skilled the process
- Improved air tightness and insulation
- Minimise Carbon Footprint
Timber Shelter Background

Grenada, Aceh, and other shelter projects provided an interest in timber construction after disasters.

Paper produced for Haiti for classroom modules.

Timber frame technical support to Cambridge University. Included manufacture of 1:1 model.
Timber Frame – Evolution and development

Round

Post & Beam

Open Panel

Platform Construction

Segal Method

Modified Timber Products
Challenges

Quality (DRR)

Climate

Time

Cost

Skills

Hazard

Logistics

Guiding Principles

• Basic Skills

• Basic Hand Tools

• Limited Materials

• Minimise Waste

• Fast & Simple Construction

• On & Off Site Production

• Robust Connections

• Adaptable

• Upgradeable
Design
Construction
Application

Timber Construction Research Project

Shelter & Construction – www.shelter-consultants.com
Next Steps

• Foundation Design – Ground Bearing and Suspended
• Cladding Options – Roof and Walls
• Hazard Specific Design and Construction Details
• Adaptation
• Thermal Performance – Cold / Hot Climate
• Ventilation
• Joinery – Doors and Window Design and Manufacture
• Public Buildings
• Urban Multi Occupancy – 2 Storey Platform Frame
• Mobility Access
• Off-Site Manufacturing
• Logistics Tools
• Training Material
• Field Testing