



Specifications Shelter Items


International Organization for Migration,


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PROJECT TITLE : SHELTER MATERIALS	
Item Code :	
Item Description : Plastic Sheets/ Tarpaulin	
Type	Woven Flexible Tarpaulins
Material	HDPE Black Fabric with both sides LDPE
	Lamination, Reinforced with 6 bands of 7.5 cm width
	Weave with Black HDPE fiber and coated outside
	Weave: Warp x Weft: 12 / 14 x 12 /14 per square inch
Sides	Grommets on all 4 sides at 1 meter intervals in
	Aluminum with reinforcement & hemmed with cord
Size	4X60m size roll
Weight	50 kg/roll
	Under ISO 3801
Color	Complete White Reflective with IOM Blue logo
Picture	
Packing	Bale of 5 sheets
	Weight/bale: 18.75 kg approximately (approx.)
	Dimensions & Volume/bale: 62 x 44 x 18 cm / 0.05 cbm (approx.)
	Single Color IOM logo with donor logo (if required)

Item Description : Tie/Galvanized wire	
Material & Type	galvanized wire
Thickness	1.5mm thick galvanize wire
Weight	14.1 kg/bundle
Packaging	N/a
size	Diameter 150mm bundle
Picture	 A photograph showing a coil of galvanized wire, which is a dark grey color, resting on a light-colored, textured surface. The wire is tightly coiled into a circular shape.

Item Description : Twisted Rope	
Material & Type	Cotton type twisted synthetic rope: For reinforcement of tarpaulin cover/roofing.
Thickness	3-4mm thick
Weight	3.4 kg / roll
Packaging	Individual rolls should have packed in a bale. Each bag should have labeled, size of bag, number of rolls and weight 1 bale = 70 Rolls
size	20m /bundle roll
Picture	 Two photographs of twisted rope. The left image shows a roll of bright green rope, partially wrapped in a clear plastic bag, resting on a dark green tarp. The right image shows a roll of white rope, tightly coiled, resting on a light-colored surface.


Item Description : Sand Bags	
Material & Type	Polypropylene Sandbag in thick weaving
Color	White
Weight	N/a
Packaging	Each bale should have labelled: Weight = XX Kgs, Volume = XX Cubic Meter
size	16''x30'' (410mmx760mm)
Picture	


Item Description : Timber wooden pole	
Material & Type	Sawmill Obeche timber
thickness	50mm minimum thickness
Weight	N/a
Packaging	loose
size	50mmx100mmx3400mm length (2''x4'')
Picture	


Item Description : Cap Nails	
Material & Type	Galvanized standard cap nails in packets
thickness	2mm thick
Weight	N/a
Packaging	8 packets /pack
size	75mmx3.6mm with 20mm head diameter.
Picture	


Item Description : 3 Inches Nails	
Material & Type	Galvanized nails in packets
thickness	N/a
Weight	50 kg/bag
Packaging	Packaged in polypropylene bag
size	3 inches standard length
Picture	


Item Description : 4 Inches Nails	
Material & Type	Galvanized nails in packets
thickness	N/a
Weight	50 kg/bag
Packaging	Packaged in polypropylene bag
size	4 inches standard length
Picture	

Item Description : Cement	
Material & Type	Traditional Portland Cement
thickness	N/a
Weight	50 kg/bag
Packaging	Factory Packaged in polypropylene or water proof paper bag of any type.
size	N/a
Picture	

Item Description :Langa Langa	
Material & Type	Wind security metal straps
thickness	N/a
Weight	N/a
Packaging	Packaged in bales and tied
size	20mm wide x 1.5m length each
Picture	

Item Description : Anti-termite treatment	
Material & Type	Termiguard ant termite chemical
thickness	N/a
Weight	N/a
Packaging	of 4 liters container packaged in 6 tins /carton
size	24x55x30cm High.
Picture	

Item Description : Claw Hammer	
Material & Type	High carbon steel head with claw and flat side.
thickness	N/a
Weight	N/a
Packaging	60 pieces per carton
size	N/a
Picture	

Item Description : Hand Saw	
Material & Type	Wooden/plastic handle with flat metal saw blade.
thickness	N/a
Weight	N/a
Packaging	48 pieces per carton
size	18''-20'' size
Picture	

SHELTER REINFORCEMENT KIT TYPE 1:

No.	Description	Unit	Quantity
	Fixings		
1	Wind security (Langa langa) - 1.5m length	Pcs	4.00
2	Nails - 3 inch	Lbs	2.00
3	Nails - 1 1/2 inch	Lbs	2.00
4	Tie wire, galvanised steel, 1.5mm	m	25.00
5	Rope, 10mm diam, twisted	m	30.00
6	Battens, bundle of 50 pcs	Bundle	0.20
	Anti-termite treatment		
7	Termiguard anti termite chemical	Ltr	0.20
8	Used engine oil (black oil)	Ltr	2.00
	Tools		
9	Claw hammer	pcs	0.20
10	Handsaw	pcs	0.20
11	Pliers	pcs	0.20
	Total Cost 1 Kit		

SHELTER REINFORCEMENT KIT TYPE 2

No.	Description	Unit	Quantity
	Coverings		
1	Plastic Sheeting, shelter grade - finished size 4mx5m, reinforced bands along edges (reinforcement Kits)	Sheet	1.00
	Timber		
1	Obeche Wooden poles, 2x4 inches - 330 cm length	Pcs	4.00
2	Timber, 2x3 inches - 330cm length	Pcs	4.00
	Fixings		
3	Wind security (Langa langa) - 1.5m length	Pcs	4.00
4	Nails - 3 inch	Lbs	2.00
5	Nails - 1 1/2 inch	Lbs	2.00
6	Cap nails	Packet	0.50
7	Tie wire, galvanised steel, 1.5mm	m	25.00
8	Rope, 10mm diam, twisted	m	30.00
9	Battens, bundle of 50 pcs	Bundle	0.20
	Anti-termite treatment		
10	Termiguard anti termite chemical	Ltr	0.20
11	Used engine oil (black oil)	Ltr	2.00
	Tools		
12	Claw hammer	pcs	0.20
13	Handsaw	pcs	0.20
14	Pliers	pcs	0.20
	Total Cost 1 Kit		

SHELTER REINFORCEMENT KIT TYPE 3

No.	Description	Unit	Quantity
	Coverings		
1	Plastic Sheeting, shelter grade - finished size 4mx5m, reinforced bands along edges (reinforcement Kits)	Sheet	2.00
	Timber		
1	Obeche Wooden poles, 2x4 inches - 330 cm length	Pcs	4.00
2	Timber, 2x3 inches - 330cm length	Pcs	4.00
	Fixings		
3	Wind security (Langa langa) - 1.5m length	Pcs	4.00
4	Nails - 3 inch	Lbs	2.00
5	Nails - 1 1/2 inch	Lbs	2.00
6	Cap nails	Packet	0.50
7	Tie wire, galvanized steel, 1.5mm	m	25.00
8	Rope, 10mm diam, twisted	m	30.00
9	Battens, bundle of 50 pcs	Bundle	0.20
	Anti-termite treatment		
10	Termiguard anti termite chemical	Ltr	0.20
11	Used engine oil (black oil)	Ltr	2.00
	Tools		
12	Claw hammer	pcs	0.20
13	Handsaw	pcs	0.20
14	Pliers	pcs	0.20
	Total Cost 1 Kit		

SHELTER MAINTENANCE MATERIALS

1	Plastic Sheeting, shelter grade - finished size 4mx5m, reinforced bands along edges (reinforcement Kits)	Rolls	3
2	4" nails Timber nails in Bags of 50 LBS	Bags	10
3	1 1/2" Nails Timber Nails in Bags of 50 LBS	Bags	4
4	Tie wire, galvanized steel, 1.5mm	M	4,000
5	Rope, 10mm diam, twisted	M	5,000
6	Timber, 2"x3" inches - 330cm length	PCS	500
7	Timber, 2"x4" inches - 330cm length	PCS	150
8	Timber, Battens inches - cm length	Bundle	20
9	Shovel	Pcs	10
10	Hand saw	Pcs	10
11	Claw hammer	Pcs	10
12	Pliers	Pcs	10
13	Cost of wheel barrow reinforcement	LS	40
	-		
	Total		

EMERGENCY SHELTER KIT TYPE 1

No.	Description	Unit	Quantity
1	Plastic Sheeting (4m x 5m) with holes on 4 sides at 1m intervals aluminum reinforced, labeled with IOM Logo	Pcs	2.00
2	Rope (10mm diameter)	Mtr	20.00
3	Tie/Galvanized Wire (1.5mm diameter)	Mtr	25.00
4	Umbrella nails (75x3.6mm, head diameter 20mm, thickness 2mm)	Packet	0.50
5	Iron Nails 3"	Lbs	2.00
6	Shovels (round pt with Y handle presses carbon steel)	Pcs	0.20
7	Claw hammer (high carbon steel head with claw and flat side)	Pcs	0.20
8	Handsaw (18" – 20")	Pcs	0.20
9	Lumber poles (2x4 hardwood timber; Obeche)	Pcs	6.00
	Total		

EMERGENCY SHELTER KITS TYPE 2

No.	Description	Unit	Quantity
1	Plastic Sheeting (4m x 5m) with holes on 4 sides at 1m intervals aluminum reinforced, labeled with IOM Logo	Pcs	2.00
2	Cotton type Twisted Rope (3 - 4mm diameter; 20 meters)	Rolls	5.00
3	Tie/Galvanized Wire (1.5mm diameter)	Rolls	0.50
4	Umbrella nails (75x3.6mm, head diameter 20mm, thickness 2mm)	Packet	0.50
5	Iron Nails 3"	Lbs	4.00
6	Shovels (round pt with Y handle presses carbon steel)	Pcs	0.20
7	Claw hammer (high carbon steel head with claw and flat side)	Pcs	0.20
8	Handsaw (18" – 20")	Pcs	0.20
9	Lumber 2"x2" x 12' obeche	Pcs	19.00
10	Lumber poles (2x4 hardwood timber; Obeche)	Pcs	6.00
11	Packaging bag	Pcs	1.00
12	Labor for packages	Pcs	1.00
	Total		

CONSTRUCTION OF EMERGENCY SHELTER: REINFORCED BAMA TYPE. MATERIALS AND LABOR

No.	Description	Unit	Quantity
	Plastic Sheeting:		
1	Plastic Sheeting - finish size 4mx60m, reinforced bands along edges, aluminum reinforced, labeled with IOM Logo	Roll	0.33
	Sub-Total		
	Construction Materials and Labor:		
2	Obeche Wooden poles, 2x4 inches - 280 cm length	Pcs	3.00
3	Wooden poles, 2x4 inches - 210 cm length	Pcs	8.00
4	Wooden poles, 2x3 inches - 330 cm length	Pcs	8.00
6	Wooden poles, 2x3 inches - 180 cm length	Pcs	3.00
7	Wooden poles, 2x3 inches - 330 cm length	Pcs	2.00
8	Wooden poles, 2x3 inches - 210 cm length	Pcs	12.00
9	Wooden poles, 2x4 inches - 190 cm length	Pcs	2.00
10	Wooden poles, 2x4 inches - 100 cm length	Pcs	6.00
11	Wooden poles, 2x4 inches - 260 cm length	Pcs	2.00
13	Wooden poles, 2x3 inches - 160 cm length	Pcs	4.00
14	Wooden poles, 2x3 inches - 90 cm length	Pcs	8.00
15	Wooden poles, 2x3 inches - 90 cm length	Pcs	20.00
16	Wooden poles, 2x4 inches - full length	Pcs	3.00
17	Wooden Batten 1.5x0.5 inches - 330 cm length	Pcs	30.00
18	Nails - 4 inch	Lbs	5.00
19	Nails - 3 inch	Lbs	9.00
20	Nails - 1 1/2 inch	Lbs	4.00
21	Rope, 10mm diam, twisted	m	25.00
22	Tie wire, galvanized steel, 1.5mm	m	50.00
23	Wind security (Langa langa) - 1m length	Pcs	14.00
24	Cap nails	Packet	2.00
25	Hinges	Pair	5.00
28	Labor	LS	1.00
29	Transport	LS	1.00
	Sub-Total		

Total Cost for 1 Shelter

CONSTRUCTION IMPROVED EMERGENCY SHELTERS (DIKWA TYPE) MATERIALS AND LABOR

S. No.	Item	Quantity	Unit
	<u>Improved Emergency Shelter (Dikwa Model):</u>		
1	CGI Sheet (6 feet long - 0.15mm thick)	26.00	Sheets
2	GI Plain sheet for ridge cover (12 feet x 0.15mm thick)	2.00	Pcs
3	2" x 4" x 12' Timber poles	20.00	pcs
4	2" x 3" x 12' Timber poles	38.00	pcs
5	2" x 2" x 12' Timber poles	12.00	pcs
6	1" x 4" x 12' timber fascia boards	6.00	pcs
7	Timber battens	1.00	Bundle
8	4 inches Door hinges	1.00	Pair
9	Door latches (Inside and outside)	2.00	Nos
10	3 inches Window hinges	4.00	Pair
11	Window towel bolts	4.00	Nos
12	Langa-langa	4.00	Nos
13	4 inches timber nails	5.00	Kg
14	3 inches timber nails	4.00	Kg
15	1 1/2 inches timber nails	4.00	Kg
16	Roofing nails	2.00	Packets
17	Fdn Block inclusive of cement and Mortar. 6 inches.	6.00	Item
18	Approved laterite fill compacted & side drains to approval / Transport	1.00	Item
20	Plastic Sheeting - finish size 4mx60m, reinforced bands along edges, aluminum reinforced, labeled with IOM Logo	0.33	Roll
21	Labor	1.00	Item
22	Transportation	1.00	Item
	Total Cost for 1 Shelter		