Foundations

- Anchor system
- Soil foundation
- Concrete slab foundation
- Contact
Frame installation
Ground anchoring

Section showing activated Ground anchor and affected earth pillar. This also shows the necessity of compacting the earth.

Securing the frame – 5 lock points

1. Ground anchor wire secured to ground plate.
2. Ground pipe inserted into ground if possible.
3. L-bolt attached to ground plate and ground pipe.
4. L-bolt attached to metal joint 3 and ground pipe with a wing nut.
5. Wall wire attached to metal joint 3.
Important control steps marked in red
1

2

Max 6 degrees slope
CONTENTS Box A
Better Shelter
A1 _ Foundation
Assembly Manual
CONTENTS Box A1

Legend

1 2 3 4

Main steps of assembly
Sequence of assembly
Insertion path
Number of parts in step or total
Part ID number
Number of repetitions

Movement direction
Active part
Information
Detail placement
Rotate part or move to opposite part of shelter
Important detail or position

Steel

10x #011 (50cm)
4x #005 (149cm)
6x #004 (180cm)
Hole directions simplified

Recommended number of holes above ground
Repeat Step 5

BetterShelter.org
Make sure L-bolt connects ground plate with ground pipe. 10 in total.
Make sure all 10 ground anchors are fully attached to each ground plate.
Make sure all 10 joints are mounted the right way, leveled and attached to the ground pipes with L-bolts and wing nuts.
Frame installation
Anchoring to concrete slab

Improves performance in these situations:
- Flooding prone areas.
- High wind areas (coast etc).
- Protracted situations.
- Non-family applications, such as clinics, distribution centers etc., (i.e. high wear and tear).

- Increases general wind resistance
- Increases lifespan of shelter
- Increases beneficiary comfort

Concrete slab example
For 1 RHU

Concrete slab recommended dimensions
Minimum thickness 150 mm

Placement of reinforcement

Recommended reinforcement bar type:
- Mat, grid 100-150 mm
- Bar, diam 6-8 mm

Bill of Quantity - 1 std RHU
- 5-10 m measuring tape
- Thick black pencil
- Power drill
- 40x M8 anchors*
- 40x M8 washers
- 40x M8 lock nuts
- Hammer
- Suitable wrench
- Drill 20-25 mm diam
- Drill (M8)

Bolt type suggestion
- Economy sleeve anchors
- Standard wedge anchors

Concrete slab assembly
Step by step

1. Mark out & Drill holes according to below drawing

Note the rotation of L-bolt entry direction on short sides

Placement of reinforcement

Mat, grid 100-150 mm
Bar, diam 6-8 mm

Recommended reinforcement bar type:

Minimum thickness 150 mm

Bolt type suggestion

Economy sleeve anchors
Standard wedge anchors

Conform to

- Concrete slab example
- Concrete slab recommended dimensions
- Placement of reinforcement

- Bill of Quantity - 1 std RHU
- Bolt type suggestion
2. Use the ground plate as a detail template.

3. Recommended: Insert Ground pipes.


5. Place the 010 Ground plate - secure with bolt.

6. Secure with nuts and washers.

Do not overtighten.
The purpose of this document is to show implementing partners the options for using structures or RHUs.

If you find any inconsistency in the content of this document or have any suggestions, we would love to hear from you.

We facilitate a phone number to make technical communication as quick and easy as possible.