5300 litre ferrocement rainwater tank

May 2026 design • East Sumba, Indonesia

We redesigned the tank to make work easier on sites that are difficult to reach. Lower and wider, this model retains a capacity of approximately 5,300 litres and uses a mould made of six transportable sections.



A Water Connections tank in Kahaungu, East Sumba. Field photograph by Fair Future Foundation.

5,300 L
Approximate capacity

6
Mould sections

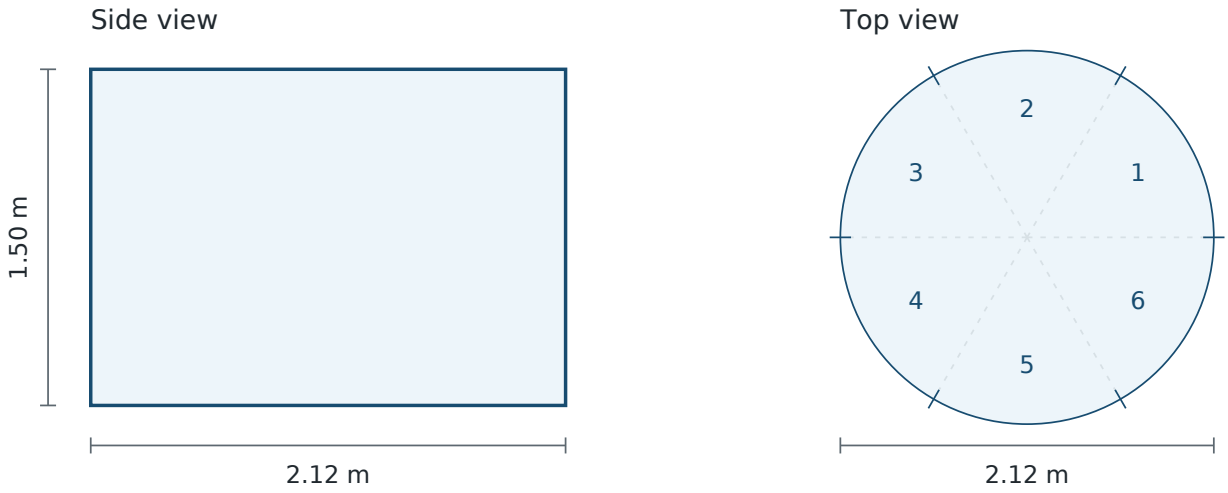
≈ 10 days
Indicative construction time

Collecting and storing rainwater

Water collected from roofs passes through the filtration system before entering the tank. This reserve brings water closer to families for cooking, washing and daily needs. Water intended for drinking must be checked for quality; storage and filtration alone do not guarantee that it is safe to drink.

The design and its dimensions

A six-section mould forms the circular tank wall. The dimensions below describe the model; they are not a construction drawing.



Schematic views. Numbers identify the six mould sections, not internal partitions.

Internal diameter	**2.12 m**
Design height	**1.50 m**
Dimension of each section	**1.11 m**
Approximate circumference	**6.66 m**

The value of 1.11 m is retained for each section. Its exact placement on the fabrication drawing remains to be clarified: straight measurement or measurement along the curve. It is therefore not positioned on these schematic views.

A format suited to field work

The design reduces the height compared with the former 2.44 m format. Its six sections are intended to make transport, handling and on-site assembly easier. Construction takes approximately ten days, depending on site conditions and team organisation.

The stated capacity is an approximate geometric volume. Usable capacity depends on the filling level and pipe connections. Structural, waterproofing and installation details must be specified in the construction documents.

Original technical document dated 15 May 2026 • Project overview