CONVOY OF HOPE
Center for Agriculture & Food Security

Natural Air Grain Dryer

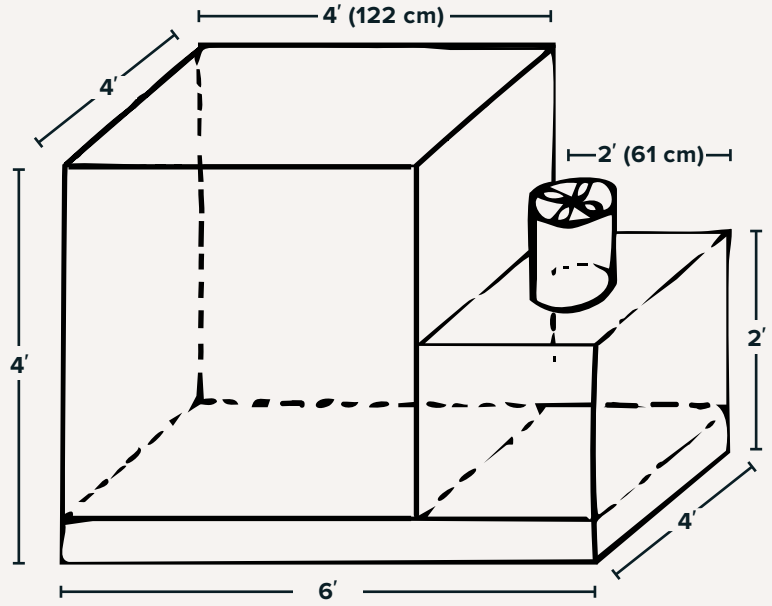
A natural air grain dryer is cost-effective to build and operate.

Key Advantages

- ☐ Preserves grains at a higher quality
- ☐ Reduces storage losses from mold
- ☐ Allows for early harvest before the grain shatter occurs, resulting in increased yield and higher prices for the product
- ☐ Operates on solar energy or electricity — no additional fuel or power costs
- ☐ Runs efficiently with low maintenance and reduced carbon footprint

Challenges

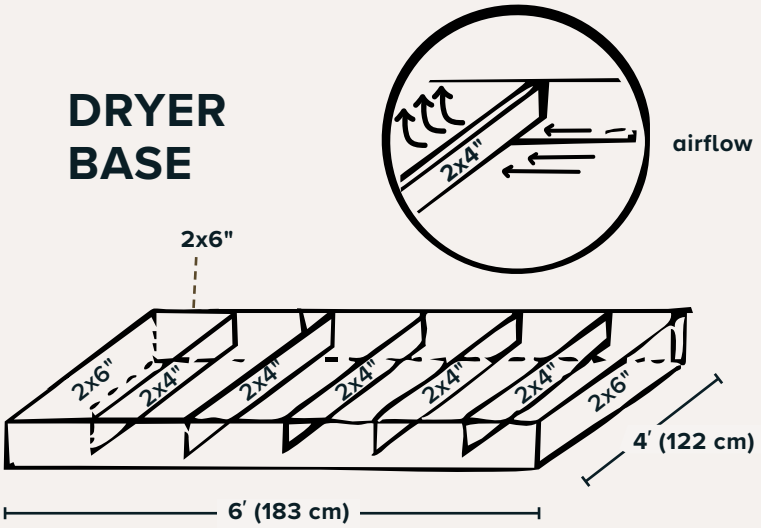
- Less effective in humid climates
- Smaller bin capacity limits amount of grain that can be dried
- Grain removal can be labor intensive since it is often done by hand



More on back ➤

How It Works

- **Airflow system:** Fans push air (sometimes heated) up through a perforated floor at the bottom of the bin.
- **Drying process:** The air carries away moisture from the grain kernels.
- **Control systems:** Some dryers have thermostats, sensors, or automation to monitor and adjust airflow, heat, and moisture levels.
- **Dual purpose**: Once grain reaches the right moisture level, the same bin often doubles as a storage unit until the grain is sold or used.



Qty.	Item	US Standard	Metric Conversion (Store Shelf)
3	**Plywood**	4′ x 8′ x 3/4″	1.21m x 2.43m x 19mm
3	**Board**	2″ x 6″ x 8′	38mm x 152.4mm x 2.44m
7	**Board**	2″ x 4″ x 8′	38mm x 101mm x 2.44m
1	**Cattle Panel**	4′ x 4′	1.21m x 1.21m
2	***Hardware Cloth (1/4")** *Varies depending on seed size OR Welded Wire	4′ x 4′	1.21m x 1.21m
1	**Burlap Cloth**	4′ x 4′	1.21m x 1.21m
1	**Industrial Blower Fan**	16″	400mm

View from top down

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