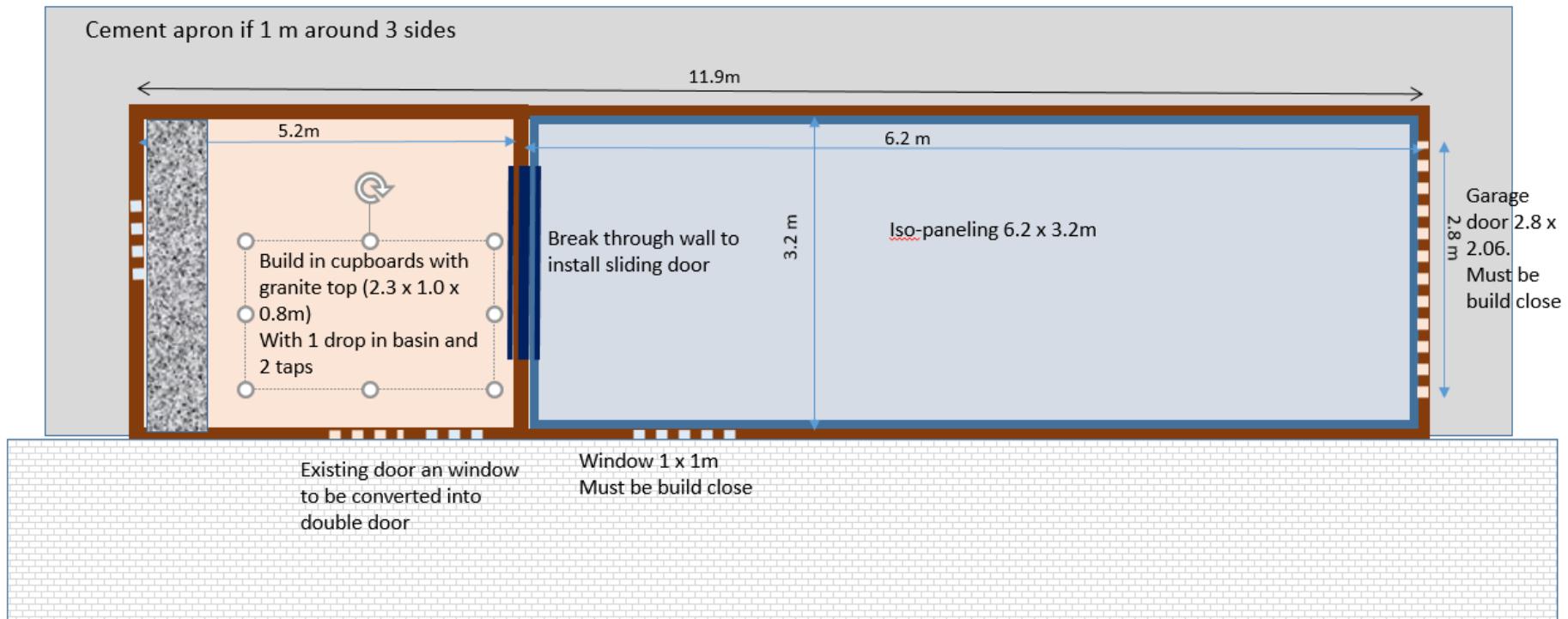


## Conversion of storage room in to seed store

### 1. Schematic diagram:



### 2. Construction

- Build 2.8 x 2.06 m garage door over
- Build 1 x 1 m Window over
- Install double wooden door
- Damp-seal (coprox) and repaint whole building

- Replace roof corrugated iron sheets
- Replace all gutters
- Paint roof (Corrugated iron and rafters)
- Break through between the rooms in order to install the sliding door for the seed store
- Cement apron of 1 meter around the three sides

### 3: Seed storage room

#### Panelling

- Panelling of room 5.2m x 3.2m x 2.6m (51.584 cubic meters)
- Virgin Grade Expanded Polystyrene cladded with 0.5mm white Chromadek or polyester coated
  - Density: 20 – 30 kg/m<sup>3</sup>
  - K value Thermal conductivity: 0.036W/m.K
  - Water Vapour Diffusion Resistance: 30
  - Tensile strength: 280 Kpa
  - Heat Capacity: 1500 J/kg K

#### Sliding Door Cold Room

- Size: standard size
- Thickness: 100 mm for normal cold room
- Chromadek or polyester coated k or similar sheets filled with 40-42 kg / m<sup>3</sup> density polyurethane insulation material.
- Accessories, carrier rails, wheels, handles and plastic parts used in our doors, are manufactured in accordance with international standards.

#### Cooling Unit

- Refrigeration Unit
- Must maintain 4°C ±3°C in 55cubic meter area
- For use with: Isowall Freezerkit 6m x 6m – Low Temperature Freezer Room.
- Low Temperature: Suited To Operate at a Minimum Temperature of about 4 Degrees Celsius.
- Unit is housed in a high strength, galvanised, weatherproof steel structure.
- The condenser arrangement allows for indoor use.
- Efficient Micro-Channel Condensers and High Performance Evaporator Coils.

- Liquid Line Drier.
- Integrated Vertical-Discharge Condenser.
- Fully Wired Internally Mounted Electrical Panel with System Controller.
- High Pressure Safety Cut Out as Standard.
- Low Pressure Control with Pump Down Cycle as Standard.

#### **Dehumidifier**

- Easy to open for cleaning
- Hour counter
- 25 litre large dehumidifier
- 5 Litre Tank Capacity
- Anti-bacterial filter/ Air Purifying
- Low Energy consumption
- Strong, retractable carry handle and castor wheels
- Stops dehumidifying when the tank is full (automatic shut-off when full)
- Simple to use LCD controls

#### **Flooring:**

- Polyurethane (PU) Concrete cover (6.2m x 3.2m)

### **3: Work storage room**

- Build in cupboards with granite top (2.3 x 1.0 x 0.8m)
- High traffic ceramic tiles (5.2m x 3.2m)
- Drop in basin with hot and cold water
- Geyser (50 litter)
- Install 5 wall electrical outlets
- Bugler bars in front of Window
- Metal venetian blinds for window
- security burglar gate in front of double door
- Small roof in front od double door
- Aircon for room (5.2m x 3.2m x 2.6m about 45m<sup>3</sup>) 9000 BTU

#### **4: Emergency back-up-generator**

- 30kVA standby power at 230/400v @ 50Hz 1500rpm
- High-quality six-cylinder 9.726l turbocharged diesel engine
- Silent canopy which can stand outside with lockable doors
- Automatic changeover (ATS), maintenance free batteries and trickle charger
- With a H-specification insulation, brushless alternator with AVR
- provides stable output
- High-temperature and oil pressure sensor to protect against engine damage
- Easy to use digital controller with auto/manual start options
- Supply must sets undergo a comprehensive testing/pre-delivery inspection prior to delivery
- One year/1000 hour warranty

#### **5: Shelving for cold store**



20 Shelving units and 40 additional shelves

- Dimensions: 1150 x 500 x 1900 mm high

- Galvanised steel units suitable for dry storage as well as cold storage.
- Galvanized unit shelves manufactured from 0.8mm and 1.2mm uprights.
- Stainless steel unit shelves manufactured from 0.8 and 1.2mm 430-grade stainless steel.
- Multi slotted uprights.
- Nut bolting system.
- Easy to assemble.



Polypropylene Plastic Stack and Hang bins

- Stackable or stand alone
- Made of polypropylene
- Reinforced ribs for additional strength
- Slot for labels on front



200 - Code 3 (105mm x 75mm x 190mm)

200 - Code 5 (140mm x 130mm x 280mm)

50 - Code 8 (420mm x 180mm x 375mm)

## **6: Service provider**

- Service provider must be certified installers of cold-rooms and refrigerator units
- Must be able to proof that they have the skills and capacity to complete the tasks
- Must have suitable CIDB grading