

# EXPLANATORY NOTES ON TAMS COSTINGS

## Version 3 - 1<sup>st</sup> March 2011.

**Note 1:** This notice replaces all previous interpretations.

**Note 2:** Some assumptions have been made, but these do not affect overall costs. Also, to avoid the mathematics being even more complicated, some minor simplifications have been made in the detailed costing procedures.

**Note 3:** Buildings and structures should be measured by the field officer to the best of his or her ability. All dimensions should be recorded to the nearest 0.01 metre, i.e. to the nearest centimetre: (19.67 m, and not 19.674 m).

**Note 4:** Demolition Costs. The cost of the demolition of existing walls, or any other part of a building, in conversions cannot be grant-aided.

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## 1 General Items

- 1.1 **Points of Measurement.** Houses are measured internally, between the inner faces of the external walls (see Fig. 1). The length of a building is measured in the same manner.

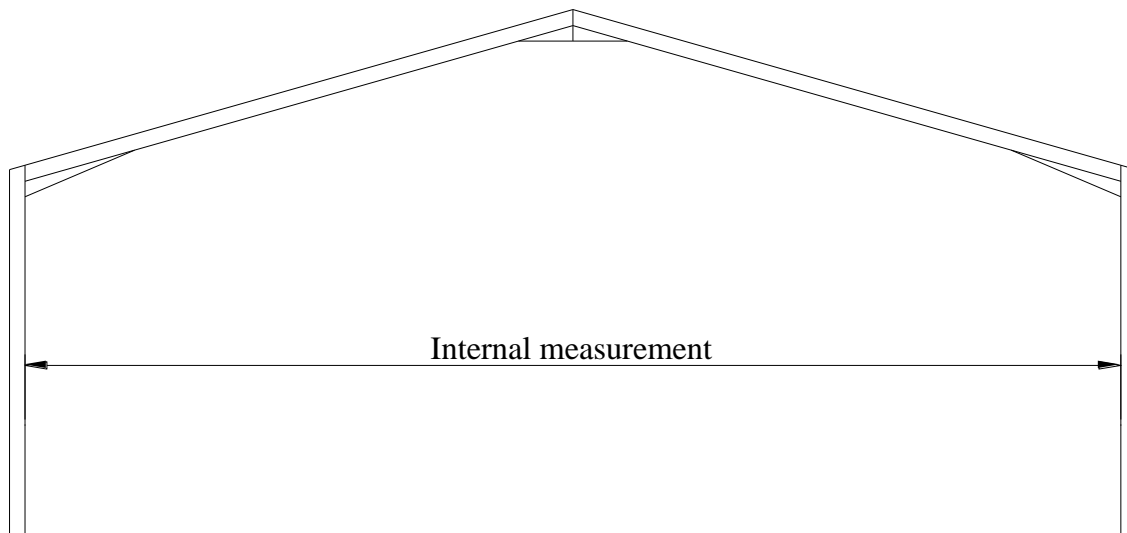


Figure 1: Measurement across a building

- 1.2 **Own Labour Cost:** This cost is the accepted rate for own labour. It is used to calculate the receipted cost of the works. It is at no time ever added to the reference cost of the works undertaken. The main reference costs as given include the cost of labour.

## 2 Conversions

- 2.1 **“Conversion”** means the work involved in upgrading an existing structure for a new purpose (e.g. unenriched cage house to barn system). “Extension” means the addition of an extra structure to a building that is otherwise unchanged.
- 2.2 **Conversion cost** shall be calculated on the cost of component parts. E.g: insulation, gutters, penning, cages.
- 2.3 Under the OFI schemes, a conversion is permitted if the building is sound and suitably located. The structure shall be in substantial compliance with specification S101, and all bracing shall be brought up to, or newly installed to full S101 requirements. [A reduction of one size in stanchions/ rafters, e.g. IPE 200 rather than IPE 220, may be allowed, but all structures below specification shall be brought to the attention of the Specialist Unit]. All missing or defective gutters and down-pipes shall be replaced, and the discharge from the down-pipes shall be directed to a clean water disposal system.

- 2.4 **Guttering on Existing Buildings.** Measurements to be taken per linear meter along the roof eave.

### **3 Laying Hen Housing**

- 3.1 **All new hen housing.** Multiply hen numbers by the appropriate rate. This covers all aspects of a new house except for ancillary concrete to house. The cost is the same whether the building is steel or timber framed. No deductions are required for new buildings sharing a common wall with another building. The cost of meal bins and manure pits are not included in the grant-aid cost and are not eligible items
- 3.2 **Ancillary concrete:** Area equivalent to 16m strip along across gable of the building.
- 3.3 **Conversion** of existing unenriched house to new system. This is based on the cost of the items that are replaced. Use the costings to ensure that the correct units are used for calculate the cost.

### **4 Pig Housing**

- 4.1 **Pig Housing.** Multiply the appropriate rate by the number of sow places in the building. This covers all aspects of the building except for the tank and ancillary concrete. Tanks under the building shall be costed as per section 5. Meal bins are not included in the grant-aid cost of the feeding systems and are not eligible items.
- 4.2 **Ancillary concrete.** Area equivalent to 16m strip along across gable of building.
- 4.3 **Conversions:** Conversions shall be costed based on component parts installed. Use the costings to ensure that the correct units are used to calculate the cost.

### **5 Concrete Slurry Tanks for Pig Housing**

- 5.1 **Measurement of Tanks.** Tanks are now costed on a component basis:-
- Each linear metre of external wall;
  - Each linear metre of any spine wall;
  - The floor area of the tank;
  - The excavated volume of soil;
  - The volume of backfill.

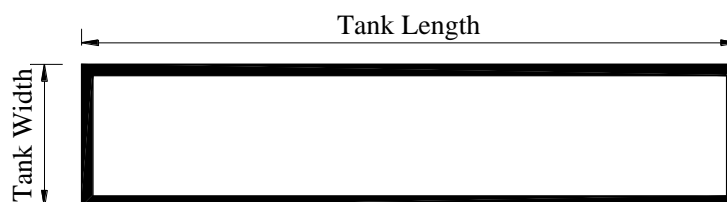


Fig. 2: Tank type 1: Standard Tank

- 5.2 **Calculation of tank walls.** The external tank wall length is either directly measured from external corner to external corner, or calculated from the internal length of the tank with additions for the wall thickness. The external width is also measured in the same manner which means, in effect, that each corner is counted twice. (This is to allow for the extra cost of constructing corners.) The internal depth is measured directly from the top of the wall to the floor of the tank. The costings give a linear metre rate for each wall height and thickness of wall.
- 5.3 **Calculation of tank floor.** External Tank Length + 0.5m multiplied by External Tank Width + 0.5m.
- 5.4 **Calculation of excavated volume.** External Tank Length + 2metres multiplied by External Tank Width + 2 metres multiplied by Internal Depth + 0.5metres. Where simple or very little excavation is required (sloped ground or existing dug-out storage) then only actual volume excavated is calculated.
- 5.5 **Calculation of backfilling.** Calculate the length of all the external tank walls added together, and add on an extra 4m (this allows for the backfill in the four corners). This figure is multiplied by the internal depth of the tank, and then multiplied by 1.0m. This gives the cubic content of backfilling. Where simple or very little backfilling is required (sloped ground) then only actual volume backfilled is calculated.
- 5.6 **Cost of extended tank covers.** The cost of any external covers for tanks extending beyond the end of an animal building are **not** included in the cost of the animal area and as such should be added on to the cost of the building. The covers to extended tanks are measured up to the outside face of the gable end of the house; then costed at the appropriate rate for the cover (heavy duty slabs or slats). The cost of safety manholes are additional to the external cover, and it is permitted to grant-aid as many external safety manholes as have been provided.
- 5.7 **Solid Spine Walls.** The length of each spine wall is measured and multiplied by the appropriate rate. (No **foundation** rate is allowed to be given for spine walls.) All reinforced concrete beams are costed at the **beam** rate. The length of the beam is considered to be the opening width plus 0.3m (150mm bearing at each end).

- 5.8 **Pillar and Beam Spine walls.** The length of each spine wall is measured and multiplied by the appropriate rate. (No **foundation** rate is allowed to be given for pillar and beam spine walls.)
- 5.9 **Where steel reinforcing is required for 4m wide tanks** and over, or as a precaution against flotation where ground water is a problem (i.e. where full drainage cannot be provided), an allowance for steel mesh should be made. The use of A393 mesh is for exceptional flotation problems only, and an Engineer shall confirm need for A393 mesh.
- 5.10 **Mesh in floors of tanks.** When mesh is installed in the floors of tanks the area with mesh is to be calculated as the internal floor area of the tank.
- 5.11 **Costing of shallow tanks.** Shallow tanks (1.2m or less) are costed in the same manner as standard tanks, except the wall rate is based on the appropriate **mass concrete/concrete block wall** rate.
- 5.12 **Costing of slurry channels / transfer channels.** Slurry channels / transfer channels are costed as per shallow tanks.
- 5.13 **Tanks in existing buildings.** Where tanks are constructed within existing buildings allow 8% extra to the basic cost (excavation, backfill, outer walls and floor) to cover the cost of work in confined space and for temporary supports to the existing structure during construction work. (No extra for spine wall or beams to be allowed).
- 5.14 **Channel running alongside tank.** Where the channel and tank share a common wall no deductions are made for the first 2 metres of common wall. For all additional common wall appropriate deductions are to be made for walls, floors, excavation and backfilling.
- 5.15 **Simple excavation.** Where simple or very little excavation is required (sloped ground or existing dug-out storage) then only actual volume excavated is calculated.

## **6 Mobile Sheep Handling Facilities**

- 6.1 **Mobile Sheep Handling Unit.** Cost is per unit, excluding penning.
- 6.2 **Mobile Rollover Crate.** Cost is per unit.
- 6.3 **Mobile Weighing Scales.** Cost is per unit.
- 6.4 **Mobile Specialised Sheep Spraying Facility** is based on unit cost.
- 6.5 **Mobile footbath** integral to handling unit. Included in basic cost of Handling Unit
- 6.6 **Mobile Batch Footbath** is based on unit cost.

6.7 **Penning for mobile unit.** Cost is per linear metre of penning with handling unit. Penning is not eligible without handling unit. A maximum of 75 linear metres of penning is eligible for grant-aid.

## **7 Sheep Fencing**

7.1 **Fencing.** Multiply the appropriate fence type cost by number of linear metres being constructed. Fence costs are the same for those constructed on a bank as at field level.

## **8 Milking machine and milk cooling equipment**

8.1 **Milking Machine.** Cost is calculated by multiplying the number of cluster units by the **Milking Machine** rate. This rate only covers the machine itself, it does not include any stall work, mangers, feeders, etc.

8.2 **Rotary Milking machine.** Cost is calculated by multiplying the number of cluster units by the **Rotary Machine** rate.

8.3 **Robotic Milking Machines.** The cost given is per robotic unit.

8.4 **Autowashers.** The cost is per auto-washer to be installed.

8.5 **Water Heater.** The cost is calculated by multiplying the capacity of the heater (in litres) by the **Water Heater** rate.

8.6 **Heat Transfer Units.** The cost is per Heat transfer Unit installed.

8.7 **Bulk Milk Tank/Bulk Milk Silo.** The cost is calculated by use of the equation given, where  $x$  = volume of the tank in litres and  $y$  = the cost of the tank. For example if the proposed tank is 10,000 litres capacity, to get the cost of the tank multiply 10,000 x 1.3231 and then add 12548. This gives a cost of €25,779.00 for the tank. This cost includes the compressors and autowashers for the milk tank.

8.8 **Ice Builder.** Cost is calculated by multiplying this rate by the size in Kcals.

8.9 **Plate Coolers** are separately costed if single stage or two stage. The cost is calculated by use of the equation given, where  $x$  = the capacity of the plate cooler in litres per hour and  $y$  = the cost of the plate cooler.

8.10 **Replacement compressor (for improved efficiency).** The cost is per compressor unit installed.

## 9 Rainwater harvesting

- 9.1 **Covered Drains uPVC** (150mm and 225mm) are costed per linear metre. These drains are for the purpose of rainwater harvesting only. If the drains have to be put under existing concrete then the higher rates should be used.
- 9.2 **Manholes and Sump tanks** are costed per item. The reference cost includes the cost of a heavy duty lid.
- 9.3 **Gutters and RWP (Rain Water Down-Pipes)** are costed per linear metre. These are only eligible to be installed on buildings from which rainwater is being harvested.
- 9.4 **Sump Pumps.** These are costed on a per item basis.
- 9.5 **Filters.** These are costed dependant upon the area of roof that each filter is serving.
- 9.6 **Tanks for rainwater harvesting.** The cost is calculated by use of the equation given for each tank type, where  $x$ = volume of the tank in litres and  $y$  = the cost of the tank. For example if the proposed tank is of mass concrete and 40,000 litres capacity, to get the cost of the tank multiply  $40,000 \times 0.1104$  and then add 2976.3. This gives a cost of €7,392.30 for the tank. This includes the cost of the lid and calmed inlet and overflow.
- 9.7 **Rainwater treatment.** These are costed on a per item basis.
- 9.8 **Water Meter.** These are costed on a per item basis. Where the rainwater system is being installed in a piggery, then water meters shall be installed as part of the works.