



Wastewater Treatment Systems

SUPPLIED BY



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Mr William Bolger Hynes, Site Assessment
The Rower
Co. Kilkenny

2/4/24

REF: *Site Specific Proposal for
EuroTank Wastewater Treatment System*

- Sizing and specification of Eurotank Secondary Treatment System
- En12566/3 – SR66 Certification
- Important Notes
- Specification for Infiltration area Ground Disposal, Percolation area, Tertiary Treatment System

Options,

- Gravity Discharge Percolation Trenches
- Pumped Discharge
- Sand Polishing Filter, Tertiary Treatment
- Ter3 Packaged Tertiary Unit

For Your Client;

Client Name;- **Dwelling Kilkenny Co Co**
Site Address;- **Scart, Dunbell, Co. Kilkenny**

Our Ref;- WBH KK CC Dunbell wd.

Dear William

We have noted the following from the site suitability form you sent

PVss SubSurface 32.11	PVs Surface 31.89
Bedrock/shale/Cobble @ none m BGL –	Water Ingress/Mottling @ none m B,G,L
Population Equivalent PE7	Dwelling 5 Bedrooms
Recommendation for secondary Treatment System with Tertiary Treatment and infiltration area.	
PROPOSAL	

We propose our;-

EuroTank BAF P7 EN12566/3 SR66 Certified Secondary Wastewater Treatment system with Tertiary Treatment via **Eurotank TER3 P8 Packaged Tertiary Treatment** unit on infiltration area of min **60m2**.

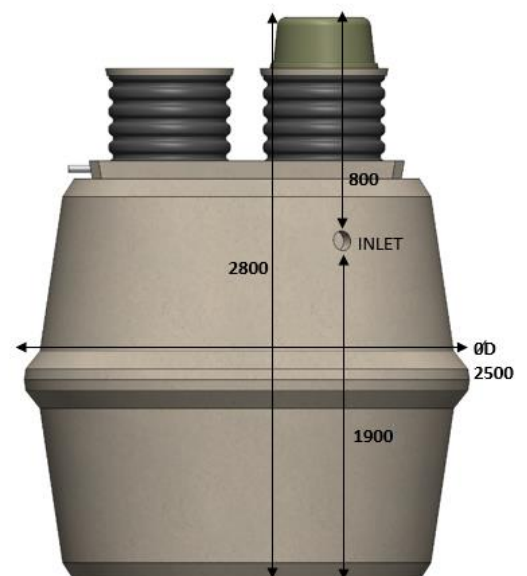
BAF2 CONCRETE + TER3

Description EUROTANK BAF is a very strong CONCRETE, Economical, Efficient, Wastewater/Sewage Treatment System for use in domestic housing and commercial applications.

The system is En12566/3 & SR66 Certified as listed on the new Pia Gmbh list for Irish Use. Eurotank BAF uses loose Bed Technology in a 3 stage process as a very simple method of treatment with great effluent quality. The range comprises various tank sizes, comes fully built and delivered with many installation advantages. Full after-sales nationwide service

Population Equivalent PE	PE 7
Certification	By PIA Gmbh To En12566/3 SR66 as listed for Irish use. (ATTACHED)
Effluent Quality As per PIA Test	BOD ₅ - 2 mg/lt <20mg/l required SS - 4 mg/lt <30mg/l required NH ₄ -N - 0.3mg/lt <20mg/l required <i>Exceeding Irish Requirement</i>
Electrical-Consumption - *Cable - *Protection *not included	1.3 kWh/D c €167/Year 2.5mm ² x 3 core SWA (up to 100m run) RCD 16 amp, 230v, 30ma, Bs 4293 standard
Concrete	45N, reinforced
Alarm	Audible for pump failure
Outlet	Gravity or Pumped
Optional Extra's	Risers – 600mm Dbl wall Coripipe Pump stations Integrated pumped distribution piping

Example EUROTANK BAF2 P6



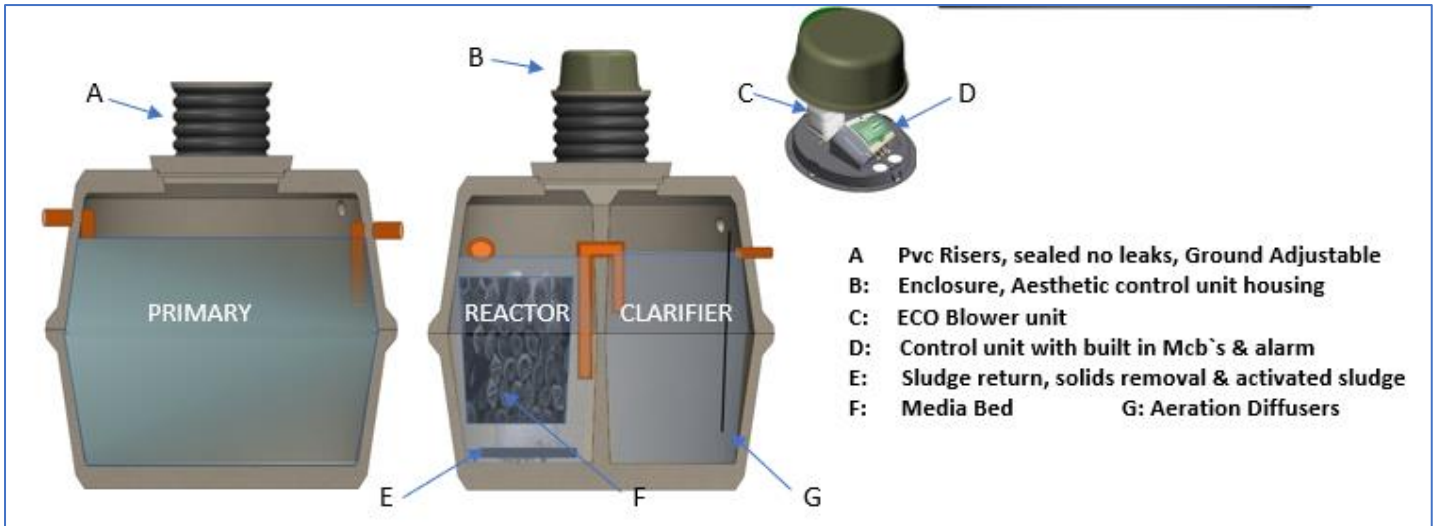
Internal Treatment Process & Chamber Layout

The unit consists of 3 chambers housed in min 2 Tanks

CHAMBER 1 – Primary settlement tank/chamber, receives & settles raw sewage

CHAMBER 2 – Reactor Chamber, Biological treatment by use of aeration and high specification media

CHAMBER 3 – Clarifier, Any remaining suspended solids are allowed to settle & are transferred by airlift to primary chamber to aid denitrification. Final effluent leaves chamber 3 via gravity or optional effluent pump.



Certification

Eurotank Baf2 +
Eurotank Ter3

En12566/3 to
NSAI SR66



TREATMENT PERFORMANCE RESULTS

TPW Systems Ltd
Ballyheige, Screen, Co. Wexford, Ireland

EN 12566-3

Results corresponding to EN 12566-3 and S.R. 66

PIA2020-SR66-2007-1024

EUROTANK BAF2 + TER3 (range with 7 models)

Biological aerated filter + packaged tertiary treatment mod

Nominal organic daily load	0.29 kg/d
Nominal hydraulic daily load	0.9 m ³ /d
Material	Concrete
Watertightness	Pass
Structural behaviour (Crushing resistance)	Pass (also wet conditions)
Durability	Pass
Treatment efficiency (nominal sequences)	Efficiency Effluent
	COD 96.6 % 28 mg/l
	BOD ₅ 99.3 % 2 mg/l
	NH ₄ -N 99.3 % 0.3 mg/l
	SS 98.8 % 4 mg/l
Number of desludging	Not more than once
Electrical consumption	1.16 kWh/d

Performance tested by:

PIA – Prüfinstitut für Abwassertechnik GmbH

(PIA GmbH)

Hergenrather Weg 30

52074 Aachen, Germany

This document replaces neither the declaration of performance nor the CE marking.

Notified Body No.: 1739 Certified according to ISO 9001:2015



Verschitz / Wemter July 2020

Tertiary Treatment/ INFILTRATION AREA

The following is a typical specification and layout for a Polishing Filter suitable for this application and Site

Sized in accordance with Table 10.1 Option 6, Epa Code Of Practice 2021

As Follows;-

For PE7 and PV 21 to 40

Eurotank TER3 P8 = P8 Packaged Tertiary Treatment System for 7PE on
On an attenuation bed (infiltration area) calculated $Pe7 \times 7.5m^2 = 52.5m^2$

Recommend Infiltration area of 60m² .

AS FOLLOWS



Description:

Eurotank TER3, is a CONCRETE Packaged Tertiary Treatment System which further treats effluent from a secondary treatment system Eurotank BAF. It is an allowed form of Tertiary Treatment, *under Option section 10.2 EpA Code of Practice '21* ideal for all sites including difficult sites, with high vulnerability, Nutrient or Pathogen Sensitive area`s and especially suited to small sites due to its small footprint.

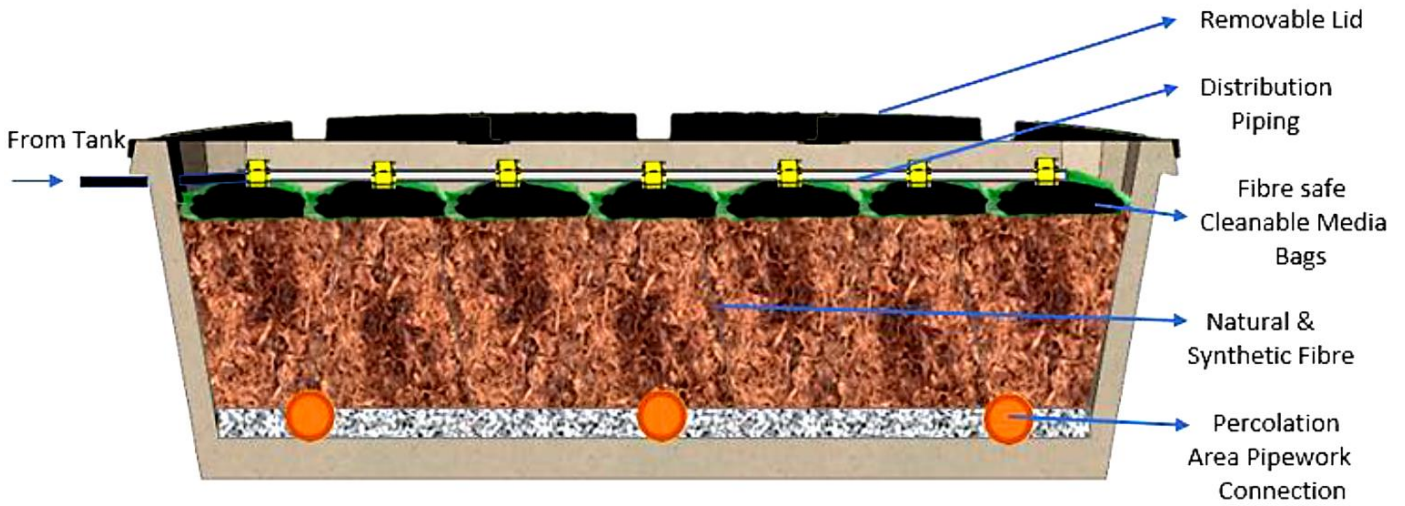
Raw sewage enters the secondary unit by gravity from the house and is treated, effluent then leaves this unit and is pumped via a network of piping over the surface of the TER3 , it then trickles down through the various layers receiving Biological treatment before final discharge to the ground. The unit is connected to a network of perforated pipes and sits on a layer of distribution gravel as a slightly raised small bed or finished at ground level, depending on the results of the percolation test.

Eurotank TER3 is a Cost effective, Efficient method of complete on-site wastewater treatment and disposal

SPECIFICATION

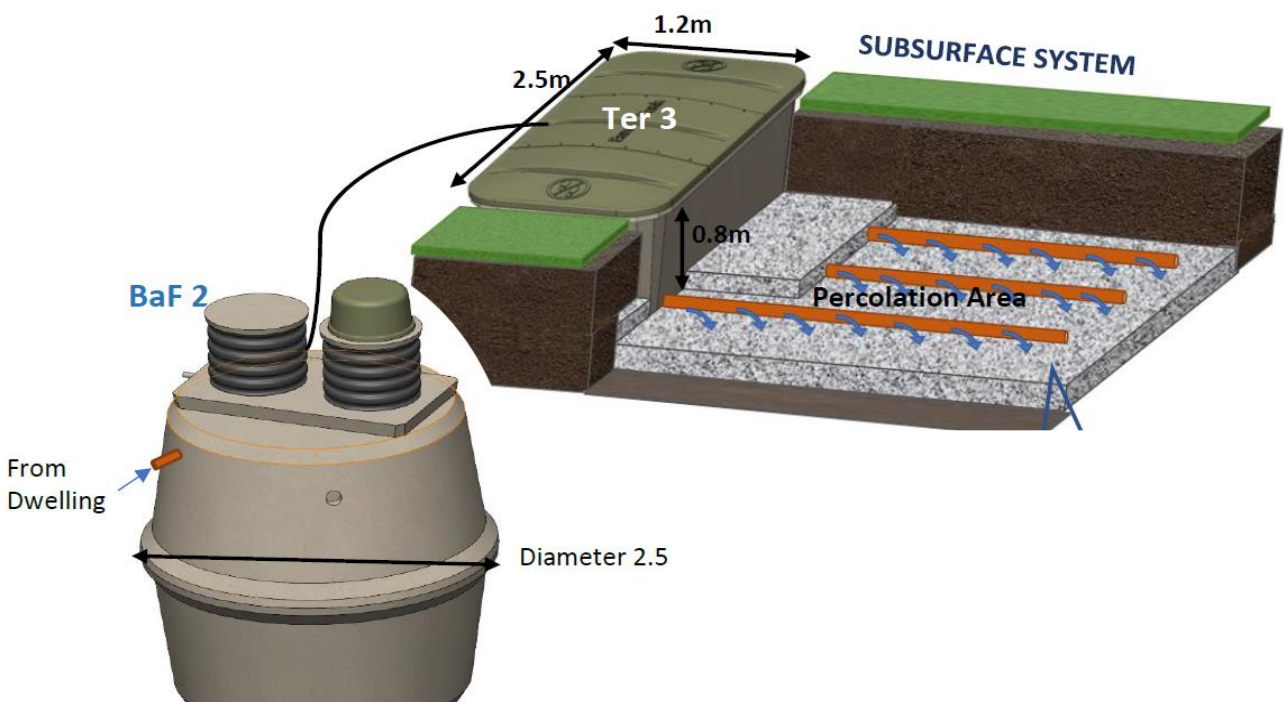
Eurotank TeR3

Population Equivalent PE	6 to 50 with configurations for 6, 9, 12, 18, 24, 36, 43, 50.		
Certification	By PIA GMBH Under EN12566/3 To Irish NSAI SR66 Standard		
Effluent Quality as per PIA Test	Bod	2mg/l	Ecoli and Total Coliform Removal<99%
	Suspended Solids	4mg/l	
	NH4N	0.3mg/l	Far Exceeding Irish Min Standards
	Phosphates	< 6mg/l	
Concrete	45n reinforced		



Operation principles

-Secondary treated water from the tank is pumped and distributed via a pipe network with orificing shielding.
 Water is distributed evenly over the Fibre safe Bags which remove any residual solids and in particular greases which ensure long life use of the natural and synthetic mix fibre Media.
 The waters then trickle through the fibre to receive final treatment and polishing before Entering the percolation pipework over a bed of stone for distribution and final discharge to underlying soils.



-Tpw Systems Ltd. offer a full supply and installation service.

Important Notes

-This proposal is based on information from the site characterisation form provided by the client for this site only

-Final specification should be passed and accepted by Site Engineer before installation.

-Installation of all elements should be supervised by suitably qualified

Professional and in accordance with product installation guide, Epa Code of

Practice 2021 with particular attention to separation distances to wells, rivers etc. with Dept of Environment Building Regulations PartH and planning permission conditions

-Maintenance agreement is available post installation

Please be assured of our continuing help throughout the process and installation

Kind Regards

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