



PROJECT QUESTIONNAIRE

WATER HARVESTING, STORAGE, TREATMENT AND DISTRIBUTION

To be completed with the customer. Tick the applicable boxes, specify units and, where possible, attach photographs, dimensioned drawings and elevation measurements. Leave non-applicable fields blank.

- ☐ **Project type:** ☐ Residential ☐ Commercial / industrial ☐ Public authority ☐ Agricultural ☐ Other
- ☐ **Project stage:** ☐ Feasibility ☐ New installation ☐ Replacement ☐ Expansion ☐ Compliance upgrade
- ☐ **Enquiry date**
- ☐ **Project reference / X'Pertus contact**

1 • Customer details and project background

- ☐ **Customer name / company name**
- ☐ **Contact person / job title**
- ☐ **Telephone**
- ☐ **Email address**
- ☐ **Billing address**
- ☐ **Installation site address / postcode**
- ☐ **Site type:** ☐ Residential property ☐ Farm ☐ Industrial site ☐ Public-access building ☐ Construction site ☐ Other
- ☐ **Site activity / constraints (access, working hours, safety)**
- ☐ **Installation works by:** ☐ Customer ☐ Installer ☐ Groundworks contractor ☐ To be confirmed
- ☐ **Required commissioning date / indicative budget excl. or incl. VAT**

2 • Intended water uses and demand assessment

- ☐ **End uses:** ☐ Garden watering ☐ Irrigation ☐ Cleaning ☐ Vehicle washing ☐ Process water ☐ Toilet flushing ☐ Other
- ☐ **Other uses:** ☐ Livestock watering ☐ Fire-water reserve ☐ Construction works ☐ Cooling ☐ Domestic non-potable use
- ☐ **Drinking-water use considered**
- ☐ **Equipment to be supplied / number of points of use**
- ☐ **Average demand:** L/day or m³/day | **Peak demand:** L/h or m³/h
- ☐ **Operating frequency / seasonality / required storage autonomy (days)**
- ☐ **Required water quality:** ☐ Non-potable ☐ Defined process-water specification ☐ Potable (separate assessment) ☐ To be determined

Important: rainwater, borehole water and mains drinking water are subject to different requirements depending on their use. No individual treatment device guarantees potability.

3 • Water source and collection method

- ☐ **Source(s):** ☐ Roof rainwater ☐ Surface runoff ☐ Borehole / well ☐ Public mains supply ☐ Spring ☐ Reclaimed water ☐ Other
- ☐ **Number of sources / proposed blending / source priority**
- ☐ **Known quality:** ☐ Test report available ☐ High solids content ☐ Sand / particles ☐ Organic matter ☐ Unknown
- ☐ **Water analysis: date, parameters, laboratory / available results**



3A. Rainwater harvesting and catchment areas

- ☐ Roof type (tiles, sheet metal, flat roof, other) / materials / potential contamination
- ☐ Horizontal projected catchment area (m²): | Number of roof slopes:
- ☐ Each roof slope: length (m) × width (m):
- ☐ Roof pitch: % or ° | Orientation / eaves height: m
- ☐ Number of downpipes: | Gutter profile and dimensions:
- ☐ Downpipe internal diameter (mm): | Known collection flow rate:
- ☐ Location / climate zone / design rainfall data:
- ☐ Existing / proposed pretreatment: ☐ Leaf guard ☐ Coarse screen ☐ Inlet filter ☐ First-flush diverter ☐ None
- ☐ Downpipe locations and distance to storage for each (m)

3B. Borehole, well, spring or mains water

- ☐ Borehole / well depth (m): | Static / pumping water level (m):
- ☐ Available yield (m³/h): | Existing pump: make / power / flow / total dynamic head
- ☐ Mains supply: available pressure (bar): | Flow rate (m³/h):
- ☐ Inlet pipe diameter / material, meter, shut-off valve, existing backflow protection
- ☐ Pipe run and elevation difference from source to tank: m / m
- ☐ Known permits / registrations / restrictions (borehole, abstraction, uses)

4 • Conveyance to storage

- ☐ Transfer method: ☐ Gravity-fed ☐ Pumped ☐ Combined ☐ To be assessed
- ☐ Developed length of each inlet pipe run (m) / obstacles / bends
- ☐ Elevation difference between intake and tank inlet (m)
- ☐ Pipe material: HDPE / PVC / other; internal and external diameters (mm)
- ☐ Required min. / max. inlet flow (m³/h) and available pressure (bar)
- ☐ Proposed fittings: ☐ Manifold ☐ Isolation valve ☐ Check valve ☐ Filter ☐ Suction strainer ☐ Meter ☐ Solenoid valve
- ☐ Safeguards: ☐ Overflow ☐ Non-return device ☐ Approved air gap / backflow prevention ☐ Bypass ☐ Leak detection ☐ None
- ☐ Excess-water disposal: soakaway / surface-water drain / other / discharge location

5 • Storage tank type and installation location

- ☐ Preferred system: ☐ Flexible bladder tank / pillow tank ☐ Rigid tank ☐ Modular tank system ☐ Advice required
- ☐ Installation: ☐ Above ground, outdoors ☐ Inside building ☐ Under shelter ☐ Underground ☐ Partially buried
- ☐ Preferred material: ☐ Technical PVC ☐ HDPE ☐ GRP / fibreglass ☐ Concrete ☐ Steel ☐ Other ☐ No preference
- ☐ Target usable capacity (m³ or L): | Gross capacity: | Number of tanks:
- ☐ Available footprint: m² | Clear L × W × H (m): × ×
- ☐ Site elevation / ground level variation / ground slope (%)
- ☐ Base / foundation: ☐ Compacted soil ☐ Concrete slab ☐ Gravel ☐ Asphalt ☐ Soft ground ☐ To be constructed
- ☐ Ground bearing capacity / settlement risk / groundwater table (if known)
- ☐ Exposure: ☐ Frost ☐ UV ☐ Heat ☐ Rodents ☐ Wind ☐ Flooding ☐ Vehicle traffic



- ☐ Buried tank: depth, cover, surface loading, groundwater, excavation access
- ☐ Delivery access: gate width (m), clear height (m), handling / crane access
- ☐ Exact location on drawing; distances to buildings / boundaries / buried services
- ☐ Requirements: opaque tank / protection from light / access hatch / vent / ladder / level gauge

6 • Inlets, outlets, tank connections and overflow

Always specify nominal diameter (DN) or internal/external diameter and connection type (thread / flange). Measure locations from a single reference corner.

Connection / purpose	DN / Ø / connection type	Height above ground (mm)	Position / offset (mm)	Pipe run (m)
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- ☐ Required connections: ☐ Fill inlet ☐ Suction outlet ☐ Drain ☐ Overflow ☐ Vent ☐ Level gauge ☐ Return
- ☐ Number / orientation of tank connections (left, right, top, bottom, front)
- ☐ Connection fittings: isolation valves, quick couplings, flanges, unions, flexible hoses
- ☐ Overflow: diameter, discharge elevation, distance to drainage point (m)
- ☐ Isolation, complete drain-down and maintenance access requirements

7 • Pumps, pressure boosting and electrical supply

- ☐ Pump required: ☐ No, gravity-fed ☐ Yes, submersible ☐ Yes, surface-mounted ☐ Booster set ☐ To be sized
- ☐ Number of pumps / standby pump requirement / manual or automatic operation
- ☐ Design flow rate (m³/h): | Required pressure at point of use (bar):
- ☐ Suction lift / discharge head (m): /
- ☐ Suction / discharge pipe length (m): /
- ☐ Total elevation difference (m): | Number of bends / valves / filters:
- ☐ Power supply: ☐ 230 V single-phase ☐ 400 V three-phase ☐ Solar ☐ Not available
- ☐ Distance to electrical supply (m) / protective devices / plant room
- ☐ Controls: ☐ Pressure switch ☐ Variable-speed drive ☐ Float switch ☐ Level sensor ☐ Timer ☐ Remote monitoring

8 • Water preservation, filtration and treatment

- ☐ Typical storage time: ☐ Under 7 days ☐ 7–30 days ☐ Over 30 days ☐ Variable
- ☐ Issues to control: ☐ Sediment ☐ Odours ☐ Biofilm ☐ Algae ☐ Turbidity ☐ Microorganisms ☐ Other
- ☐ Basic protection: ☐ Sealed cover ☐ Light-proof tank ☐ Screened vent ☐ Inlet filtration ☐ Maintenance
- ☐ Treatment requested / to be assessed: ☐ Sediment filter ☐ Activated carbon ☐ UV disinfection ☐ Ozone generator ☐ Other
- ☐ Proposed filtration rating (µm) / treatment flow rate (m³/h)
- ☐ UV: installation location, water quality and UV transmittance, operation monitoring
- ☐ Ozone: injection / contact method, safety, off-gas control and material compatibility



☐ Activated carbon: treatment objective (odour, organic compounds, etc.) / replacement frequency

☐ Required testing and monitoring: microbiological / physicochemical / turbidity / other

☐ Maintenance: intervals, responsible person, consumables and access

UV, ozone and activated carbon perform different functions. Treatment selection depends on raw-water quality, storage duration and intended use; safety and regulatory compliance must be verified.

9 • Water distribution and consumption points

☐ Distribution method: ☐ Gravity ☐ On-demand pump ☐ Booster set ☐ Pressurised pipework ☐ Automated irrigation

☐ Network layout: ☐ Single outlet ☐ Multiple outlets ☐ Multi-outlet manifold ☐ Buried network ☐ Mobile system

☐ Distance from tank to first outlet (m) / furthest outlet (m)

☐ Elevation difference from tank to highest point of use (m)

☐ Distribution pipe diameter (DN/mm), materials, total pipe run length (m)

☐ Number of simultaneous draw-off points / flow per appliance / required pressure (bar)

☐ Components: taps, valves, solenoid valves, meters, hoses, connectors

☐ Potable / non-potable network separation: ☐ Planned ☐ Existing ☐ To be designed ☐ Not applicable

☐ Labelling, access control and backflow protection requirements

10 • Operation, compliance and required services

☐ Scope: ☐ Supply only ☐ Engineering / sizing ☐ Installation ☐ Commissioning ☐ Maintenance

☐ Available documents: ☐ Photos ☐ Site plan ☐ Roof plan ☐ Ground sections ☐ Water test report ☐ Pipework schematic

☐ Special requirements / applicable standards / authority or insurer requirements

☐ Existing equipment to be reused (model, reference, condition)

☐ Target service life / warranty expectations / maintenance constraints

☐ Decision date / urgency / budget range

11 • Technical review and quotation summary (X'Pertus use)

☐ Recommended system / model / material

☐ Calculated capacity / usable capacity / contingency reserve

☐ Hydraulic schematic and elevations approved: yes / no

☐ Proposed pump (Q, TDH, P) / filtration / treatment

☐ Tank connections, DN, locations and pipework confirmed: yes / no

☐ Outstanding items / further site visits or laboratory tests required

☐ Design engineer / customer approval / date

Supporting documents

☐ Photo of each collection point ☐ Photo of storage area ☐ Dimensioned plan / slope diagram ☐ Connection locations ☐ Water test reports ☐ Other:

Additional comments:

Customer signature / approval: _____ Date: _____