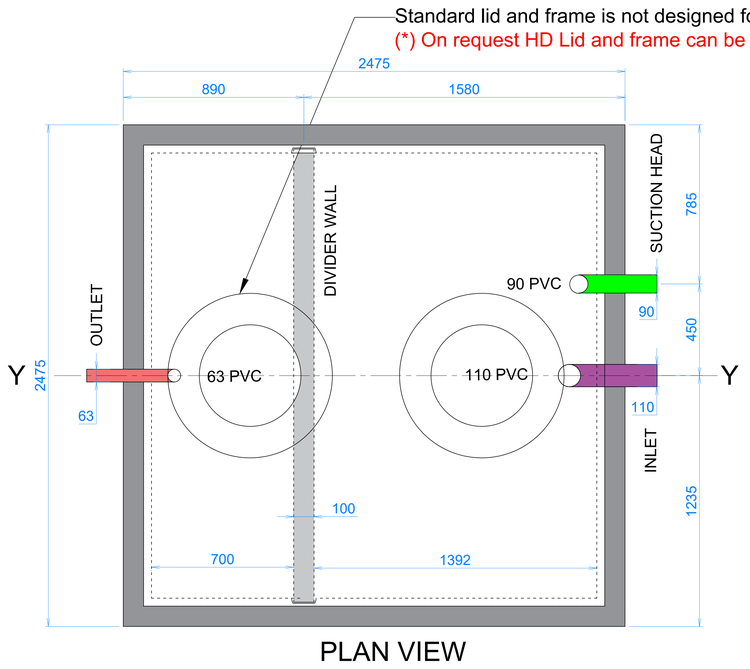
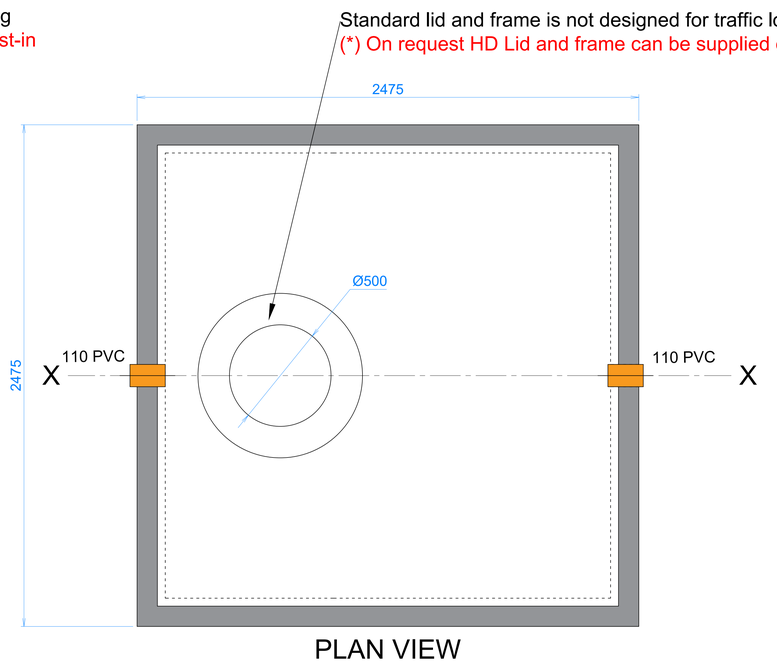
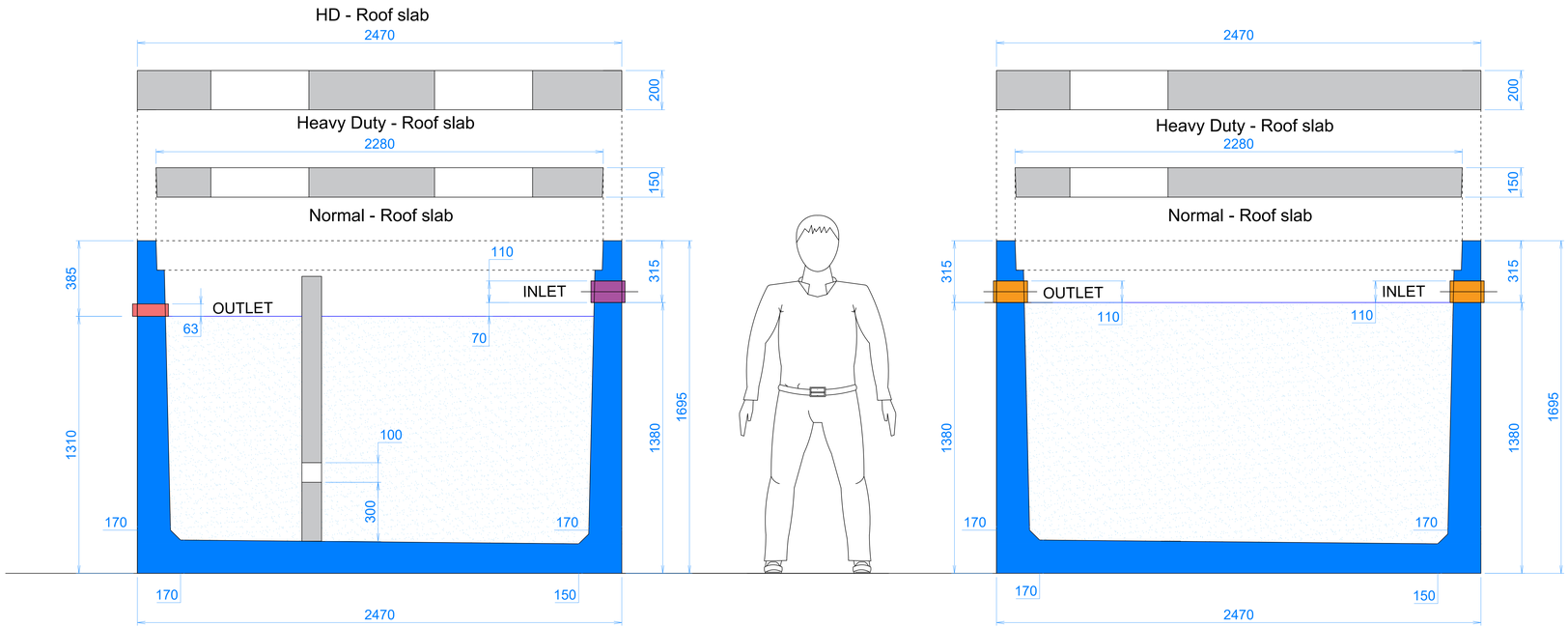


PLAN VIEW



PLAN VIEW



SIDE SECTION Y
SMALL BORE TANK

CONSERVANCY OR WATER TANK

IKAPA TANK - 6 000 LITRE TANKS

	DATE	NAME	SCALE	DRAWING NO.	REV.
DRAWN	2026 - 09 - 09	A Carstens	NTS	IKAPA - NO 10	2
CHECKED	2026 - 09 - 09	P Loubser (Eng)			

NOTES :

1. CONCRETE STRENGTH = 40 MPa MIN COVER = 30mm
2. SEPTIC TANKS CAST WITH 13MM DOLOMITIC STONE
3. HEAVY DUTY TOP SLAB ON REQUEST
4. ADDITIONAL INLET / OUTLET HOLES ON REQUEST
5. ADDITIONAL MANHOLE OPENINGS ON REQUEST

M : 082 551 556
E : info @ ikapaconcrete.co.za

VREDEKLOOF - BRACKENFELL
WESTERN CAPE - SOUTH AFRICA

iKAPA CONCRETE

Design Criteria for 6000L Tank
Tank design based on SANS 10100 :

STANDARD TANK - 6000L

Standard Roof slab (150mm seated inside tank, flush with top of wall)

- Mesh 617 (Single layer)

Light Duty Manhole & Lid - No vehicle traffic

Standard wall slab (Thickness varies from 95 @ top to 170 @ bottom)

- Mesh 617 (Single layer)

Standard Floor Slab (Thickness varies from 150 to 170) (Sloped soffit)

- Mesh 617 (Single layer)

Loading combinations for Ikapa Standard tank:

A : Light vehicle traffic (10kPa) and nominal 100mm fill
B : No vehicle traffic (0kPa) and 600mm soil fill ontop (20kN /m3)

Buoyancy - Calculations

- Need to be calculated case specific
- Factors : Backfill height , Slab type , Water table height.

Extreme condition as below :

A. No backfill on roof slab
B. Tank empty (No fluid inside tank)
C. Water table level = 0m Ground level - 100% Saturated Soil

- Current Factor of Safety= 0.69 - (Req F.O.S > 1 to prevent flotation)
- Burial required to prevent flotation : 400mm = F.O.S of 1
- or Fluid in tank required to prevent flotation : 600mm = F.O.S of 1

Non Standard applications or high imposed loads need to be checked by IKapa's Structural Engineer at an additional cost.

Special designs may include the following :

- Heavy Duty roof slab (250mm seated ontop of walls)
- Heavy Duty Manhole & Lid can be supplied on request
- Additional rebar
- Increase base slab thickness
- Burial in excess of 600mm

MANUFACTURED BY

Cape Concrete

PETER LOUBSER Pr Eng SAICE
DESIGN REVIEW APPROVED
Date : 2026 - 09 - 09

P Loubser Consulting
STRUCTURAL ENGINEERING