

# SBS Tanks®



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## COMPANY OVERVIEW

SBS Tanks® is a global manufacturer of premium modular, bolted-steel water storage tanks, delivering engineered reliability across the public, fire protection, mining, agricultural, commercial, and industrial sectors.

Founded in Durban, South Africa in 1998, SBS Tanks® has grown into an internationally recognised brand with operations and distribution across Africa, the United States, and Southeast Asia. To date, SBS Tanks® has installed tanks in 35 countries, installing more than 1,252.16 megalitres of water storage capacity worldwide.

The ISO 9001 and ISO 45001 accredited, world-class manufacturing facility ensures consistent quality, safety, and traceability across every tank. In addition to ISO accreditations, SBS® Tanks is endorsed by various industry bodies relevant to the regions and sectors served, including MS SIRIM 2017, NFPA 22 Fire Protection Standards, and ASIB guidelines.

This capability is supported by an in-house engineering department, global logistics infrastructure, on-site SHEQ officers, and an experienced project management team. End-to-end project delivery is executed through experienced sales executives and key account managers, ensuring responsive turnaround times, efficient lead times, and disciplined on-time delivery.

With a staff complement of approximately 200 people across six global offices, SBS Tanks® focuses on delivering effective, custom-designed water tanks for a wide range of sectors, applications, and customers. The cultural statement, “Build for Better,” defines how the company operates - building better infrastructure, partnerships, and teams, while contributing to more resilient communities and sustainable development worldwide.

With capacities ranging from 12,000 litres to the industry-leading 5.2 MI tank, SBS® Tanks delivers scalable solutions backed by 28 years of water storage expertise. Every tank embodies the commitment to “Build for Better” - engineered for resilience, built for longevity, and trusted where operational certainty is critical and failure is not an option.

## WHY CHOOSE SBS TANKS® ?

### **Technologically advanced design:**

Circular SBS Tanks® are designed in accordance with South African National Standard (SANS) 10160, using high-tensile Galvalume® steel. The engineered design minimises material waste, optimises water circulation, and promotes low maintenance. A multi-layered woven PVC liner (NSF/ANSI 61 & AS/NZS 4020 approved) ensures leak protection, with no structural components submerged in water - preventing corrosion and contamination.

### **World-class production with international compliance:**

Manufactured under ISO 9001:2015 standards, SBS Tanks® meet NFPA, AWWA, and other stringent industry regulations across fire protection, construction, water infrastructure, and industrial storage - ensuring durability, safety, and long-term reliability.

### **Expert engineering and project management:**

An in-house engineering team collaborates with leading industry specialists to design customised, high-performance storage tanks. Backed by 28 years of experience, dedicated project managers and specialised installation teams ensure on-time delivery and precise execution.

### **Professional accreditation and affiliations:**

SBS Tanks® meets rigorous health and safety standards across the oil and gas, mining, fire protection, agricultural, and broader industrial sectors - demonstrating the capability to deliver certified, sector-specific solutions for demanding applications.

### **Long-term partnerships:**

With more than 4,500 installations globally, SBS Tanks® is a trusted partner, fostering long-term relationships with clients, engineers, and municipalities through consistent delivery of quality, innovation, and performance.

### **Commitment to people and transformation:**

Guided by the cultural pillars “Work Smart,” “Commit Wholeheartedly,” and “Build for Better,” SBS Tanks® is dedicated to employee development, skills advancement, and meaningful transformation across the organisation.

# SBS TANKS® OVERVIEW

Water is essential to every business process. Access to clean water and sanitation has become a global priority, yet water scarcity remains an increasing concern. Climate change, population growth, rising water costs, and rapid urbanisation are driving demand for alternative water supply solutions. Sustainable and responsible water consumption, rainwater harvesting, and water recycling must become priorities for both industry and communities worldwide.

SBS Tanks® offers a comprehensive range of water storage tanks, proven to be effective and reliable across the mining, fire protection, municipal, water conservation, and commercial sectors. The SBS Tanks® product portfolio includes the Standard, Cyclonic, Elevated Tank, Engineered Solutions, and Lite ranges—designed for the storage of potable water, effluent, leachate, saltwater, and a wide range of industrial liquids.

With over 28 years of experience, SBS Tanks® has become a preferred provider of sustainable water and liquid storage tanks across multiple sectors. A strong focus on innovation ensures continued leadership in the water storage industry, with the development of advanced technologies such as Galvalume® steel panel reservoirs, high-performance liquid storage liners, and time- and cost-efficient on-site construction methods. SBS Tanks® systems are engineered to withstand cyclone, earthquake, and extreme weather conditions, delivering durability and long-term reliability in demanding environments.

## PRODUCT FEATURES

The SBS Tanks® range offers storage capacities from 12,000 litres to an industry-leading 5.2 million litres. The modular design enables rapid installation, even in remote locations, without the need for heavy equipment and with minimal site preparation.

Engineered for longevity, SBS Tanks® systems have an expected lifespan exceeding 60 years. Each installation is supported by an industry-standard 12-month workmanship and materials guarantee, along with a conditional 20-year No-Leak warranty when installed and maintained by an approved SBS Tanks® installation team.

Liquids are stored within a multi-layer woven liner (PVC or NSF/ANSI 61 accredited), ensuring no direct contact with the tank structure. This design significantly reduces corrosion risk and maintains the integrity of stored liquids across a wide range of applications.

SBS Tanks® systems are developed in collaboration with experienced engineering professionals, with a focus on performance in extreme environments and challenging site conditions. The Standard range is rated for wind speeds of up to 43 m/s (154 km/h or 96 mph), while the Cyclonic range is engineered to withstand wind speeds of up to 67 m/s (240 km/h or 150 mph), making it suitable for regions prone to severe weather events.

All SBS Tanks® can be designed for earthquake zones and high-risk climatic regions, including areas affected by tropical storms, hurricanes, and typhoons. Roof sheeting, trusses, and panel structures undergo rigorous stress testing and seismic evaluation, and are adapted to site-specific environmental conditions - ensuring a durable, resilient, and long-lasting water storage tank.

## PRODUCT APPLICATIONS



### Fire Protection

Dedicated water storage supplying the fire sprinkler and hydrant systems to ensure reliable firefighting capability.



### Public Sector

Bulk storage and treatment plants for raw water, seawater, potable water, effluent, and wastewater systems.



### Mining

Specialised storage for water, liquids, and chemicals supporting mining processes.



### Water Conservation

Rainwater harvesting and storage systems for efficient water reuse and supply.



### Commercial

Emergency back-up water supply, wastewater collection, storage and processing, and liquid and chemical storage.

# HOW TO CHOOSE THE RIGHT TANK

## SBS Galvalume Steel Bolted Tanks vs. Concrete Reservoirs



### SBS GALVALUME TANK BENEFITS

**Rapid Installation: *Speed is King.*** Our modular design allows for quick on-site assembly, reducing project timelines and enabling immediate commissioning.

**Flexibility & Customisation: *Tailor-made Solutions.*** With various sizes and the ability to relocate and expand capacities for future growth, our tanks fit your specific needs when you need it.

**Durability & Longevity: *Built to Last.*** Enjoy up to 60+ years of service with minimal degradation, thanks to our durable construction.

**Lightweight & Eco-Friendly: *Portable & Eco,*** our tanks are designed for a better tomorrow.

**Low Maintenance & Superior Sanitation: *Save on upkeep*** while ensuring the purity of your water, thanks to our non-porous, contamination-resistant design.

**Remote site access: *Easy to transport*** to remote sites with no need for access roads.

**Cost-Effective: *Quicker ROI recovery.*** More cost-effective in terms of construction and maintenance.

### CONCRETE RESERVOIRS

**Slow to Install:** Time-consuming construction, with extended periods needed for pouring and curing.

**Limited Flexibility:** What you see is what you get. Fixed sizes and structures offer no room for adjustments.

**Prone to Damage:** Over time, the structure is compromised due to cracking and erosion.

**Heavy & High Maintenance:** Difficult to elevate and demanding in upkeep, leading to increased long-term costs.

**Contamination Risks:** The porous nature raises concerns for water quality, requiring vigilant monitoring.

**Limited site access:** Access road needed for mixers and trucks adding difficulty and extra logistics to installation.

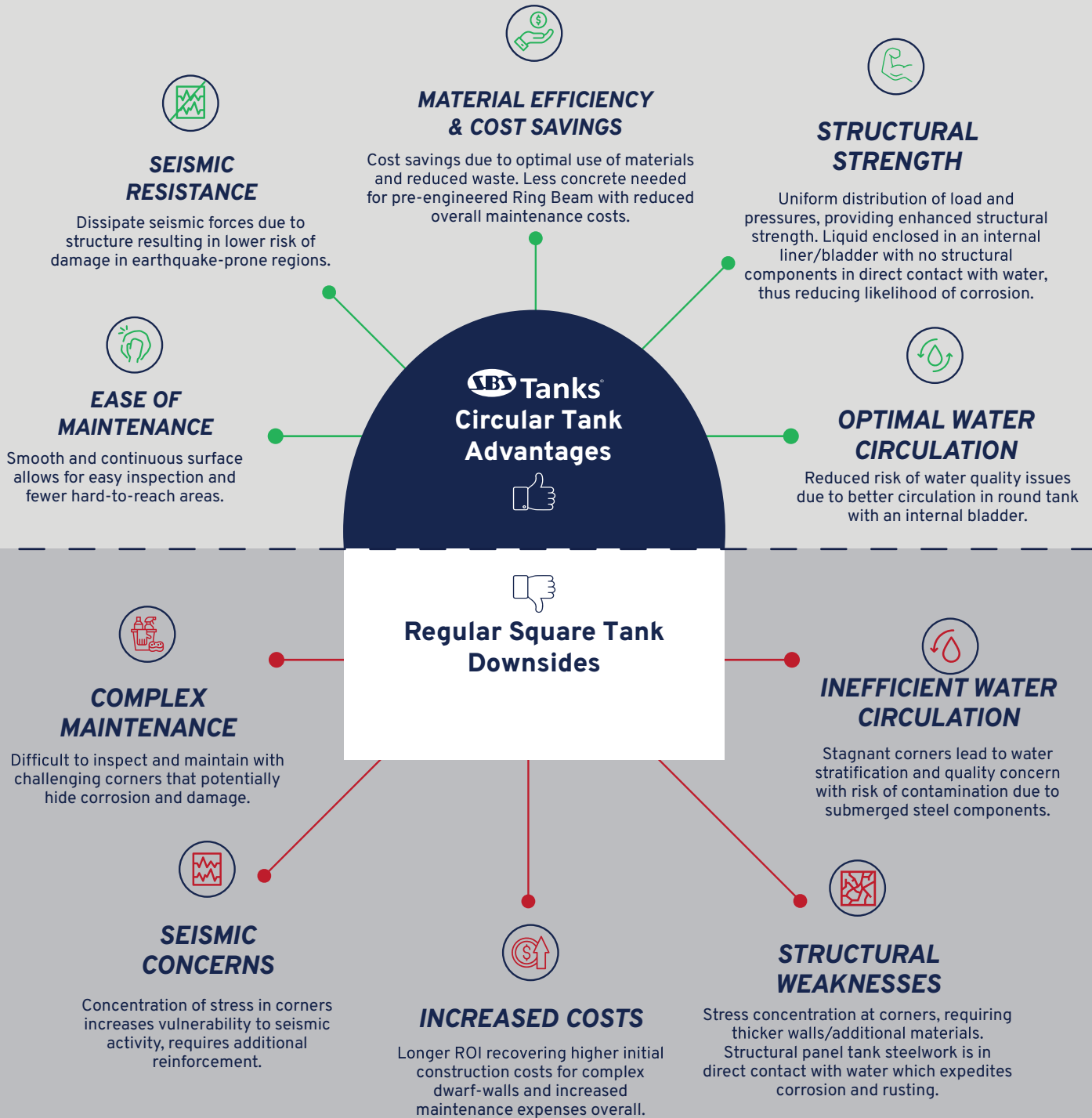
**Expensive:** Longer ROI recovering. Higher initial construction costs and increased maintenance expenses.



# THE SHAPE OF EFFICIENCY

## Circular vs. Rectangular/Square Tanks

When it comes to storing liquids, the shape of the tank significantly impacts its efficiency and cost-effectiveness. Lucky, circular tanks stand out for their superior performance compared to square or rectangular tanks when comparing on factors such as strength, maintenance and cost-effectiveness.



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# THREE ENGINEERED RANGES. ONE GLOBAL STANDARD OF RELIABILITY.

## Standard Range (ST)

Engineered for versatility and durability across municipal, commercial, and industrial applications. Designed for long-term performance with full customisation and optional seismic capability.

## Cyclonic Range (CY)

Built for extreme environments. Designed to withstand high wind speeds, cyclonic conditions, and seismic activity – ideal for high-risk regions and critical infrastructure.

## Lite Range (LT)

A cost-effective, modular solution for smaller-scale applications. Designed for rapid deployment, simplified installation, and reliable performance.

## SBS LIQUID STORAGE TANK DATA SHEET

	Standard Range (ST)	Cyclonic Range (CY)	Lite Range (LT)
<b>WALL STRUCTURE</b> Galvalume® steel panels with thickness conforming to SANS 9364 and profiled to SBS Tanks® unique design	0.8 - 4.8mm (22-6 gauge)	1.2 - 8.0mm (18-3 gauge)	0.9mm (20 gauge)
<b>STEEL GRADE</b> G300 Galvalume®	x	x	x
<b>PROTECTIVE COATING</b> Galvalume® (Zinc/Aluminium Alloy), AZ150 heavy duty coating. Additional coatings available to meet varying environmental conditions and applications.	x	x	x
<b>COLOUR RANGE</b> Mill finish - silver, standard. All SBS Tanks® can be supplied in a vast range of colours - epoxy powder coated or painted with approved primers and paints	x	x	x
<b>ESTIMATED LIFE</b> 60+ years under normal operating and environmental conditions	x	x	x
<b>LINER</b> Multi-layer woven PVC liner. Tested to NSF/ANSI 61 (potable water) specifications and AS/NZS 4020-2005 (drinking water) standards. Ethylene-based chemical resistant liners available on request, for storage of various liquids	PVC 720gsm PVC 1000gsm NSF61 XR5	PVC 720gsm PVC 1000gsm NSF61 XR5	PVC 720gsm
<b>DOME ROOF</b> Galvalume® steel corrugated sheets. G550 high tensile grade with AZ150 coating. All trusses are hot dipped galvanized after fabrication. Clear span self-supporting roof with no center post.	0.47mm (26 gauge)	0.47mm (26 gauge)	0.47mm (26 gauge)
<b>OUTLETS/INLETS</b> All fittings/nozzles are manufactured from mild steel and hot dipped galvanized to SANS 121:201150 & ISO 1461:2022 standards after fabrication. Stainless steel and HDPE fittings are available on request.	x	x	x
<b>GUARANTEE</b> SBS Tanks® carry an industry standard 12-month workmanship and materials guarantee and a conditional 20-year non-leak warranty is applicable, provided that the tank is installed by an approved SBS Tanks® installer.	x	x	Available on request
<b>WEATHER, WIND &amp; SEISMIC SPECIFICATION</b> SBS Tanks® are designed and suited for regions with varying incidence of meteorological hazards. With standard wind ratings across ranges, SBS Tanks® can be individually designed to suit earthquake zones, cyclonic regions, heavy industrial or highly specialised environments.	Wind rating 155km/h (96mph) Seismic Capabilities	Wind rating 240km/h (150mph) Seismic Capabilities	Average regional wind speed
<b>MANUFACTURING TIME</b> Standard range, ex-stock, immediately available. Non-stock items typically 4-8 weeks ex-factory, quantity, and model dependent.	x	x	x
<b>DELIVERY TIME</b> Typically, 6-8 weeks, ex-factory. Sea freight times vary based on port & carrier capacity	x	x	x
<b>INSTALLATION TIME</b> ST05/02, 20kl      1 day      (on site work) ST18/02, 253kl    3 days     (on site work) ST39/09, 5231kl   25-28 days (on site work)	x	x	Quicker
<b>SITE PREPARATION</b> Level site capable of supporting 100 kPa - 115kPa with sand bed or concrete ring beam as required. Site preparations to be arranged by client in accordance with engineers' recommendations prior to installation.	Concrete Ring Beam	Concrete Ring Beam	Compacted Sand Bed/Concrete Ring Beam

# LINER SPECIFICATION DATA SHEET

## SBS Potable Liner 720g/m<sup>2</sup> & 1000g/m<sup>2</sup> Data Sheet AS/NZS4020 Approved

**Description:** Potable water liner/bladder consisting of high-density polyester yarn coated on both sides with PVC.

**Manufacturing:** The potable liner fabric is manufactured for SBS Tanks® in an ISO 9001:2015 certified facility.

**Approvals:** Approved by the Australian water quality centre standard AS/NZS 4020-2005: Testing of products for use in contact with Drinking Water

**End Use:** As an internal liner/bladder for sole use with SBS Tanks®

TEST	METHOD	UNIT	WARP	WEFT
Tensile Strength	SANS 1421:1998	N/50mm	2500	2200
Tear Strength	ISO 4674-1: 2016 Method B	N	300	250
Weld Adhesion	ISO 2411: 2017	N/25mm		40
Flame Retardancy	SANS 1287-1: 2007	s		N/A
Electrical Resistance	SANS 5880: 2008	MΩ		N/A
Fusion	5min in Acetone	N/25mm		No flaking

## SBS Potable Liner 720g/m<sup>2</sup> & 1000g/m<sup>2</sup> Data Sheet NSF/ANSI 61 Approved

**Description:** Potable water liner/bladder consisting of high-density polyester yarn coated on both sides with PVC.

**Manufacturing:** The potable liner fabric is manufactured for SBS Tanks® in an ISO 9001:2015 certified facility.

**Approvals:** Approved by NSF/ANSI 61 (Potable water)

**End Use:** As an internal liner/bladder for sole use with SBS Tanks®

TEST & METHOD	ENGLISH	WARP
Base Fabric	Polyester 1,000 Den 5.9 [Oz/yd <sup>2</sup> ]	Polyester 1,100 Dtx 200 [gr/m]
Total Weight ASTM D 751	21.8 [Oz/yd <sup>2</sup> ]	740 [gr/m <sup>2</sup> ]
Breaking Strength – Strip ASTM D 751 method B	315 / 315 [lbs/inch]	2800 / 2800 [N/5 cm]
Breaking Strength – Grab ASTM D 751 method A	440 / 400 [lbs]	2000 / 2000 [N]
Tear Strength – Single Rip ASTM D 751 method B, DIN 53356	70 / 45 [lbs]	300 / 300 [N]
Tear Strength – Double Rip ISO 4674	130 / 120 [lbs]	600 / 550 [N]
Tear Strength – Trapez DIN 53363	55 / 55 [lbs]	250 / 250 [N]
Adhesion (HF Welding) ASTM D 751	13.5 / 13.5 [lbs/inch]	120 / 120 [N/5 cm]
Blocking Resistance Fed. St. 191-5872, 6 hrs @ 70°C		#1
Seam Strength, ASTM D 751 Procedure B, 2" overlap seam (1" width seam)		Break outside seam
Heat Resistance	Up to 158°F	Up to 70°C
Cold Bend ASTM D2136		
Abrasion (Tabler) ASTM D 3389 Weight loss (H-22, 1,000 gr)		<250 [mg/1000 cycles]
Weathering – 7,500 hours ASTM G 154 UVA 8 hrs, 60°C, 4 hrs. cond. 50°C		Very slight color change

# POWDER COATING DATA SHEET

The Ferro Vedoc, is a series of polyester based powder coatings designed for the exterior environment, offering excellent light and weather resistance. This superior UV resistant coating is ideally suited where colour retention on surfaces exposed to continuous heat is required.

TEST	TEST & METHOD	GLOSS	SATIN	MATT
Qualicoat	SANS 1421:1998	P-1251	-	P-1398
Gloss 60	SANS 2813	80 - 95	40 - 75	15 - 30
Thickness	SANS 2808	60 - 80 µm	60 - 80 µm	60 - 80 µm
Adhesion	SANS 2409	Coefficient rating of 0		
Indentation resistance	ISO 2815	Minimum 80		
Erishsen cupping	ISO 1520	No cracking or detachment at 5mm indentation		
Flexibility	SANS 177	No cracking or detachment at 5mm indentation		
Reverse impact	ASTM D 2794	2.5Nm	2.5Nm	2.5Nm
Permeability of coating		No blistering or detachment of the coating		
Resistance to atmospheres containing Sulphur dioxide	ISO 3231	No blistering and corrosion creep < 1mm		
Resistance to acetic acid salt fog	SANS 9227	No blistering and delamination and corrosion creep < 4mm		
Resistance to accelerated corrosion		Maximum creep < 0.5mm on either side		
Resistance to artificial weathering	ISO 11341	Residual gloss > 50% of the original		
Resistance to drilling and cutting		No cracking or chipping of the coating		

## STANDARD POWDER COATING COLOUR OPTIONS

SBS Tanks® can come in a variety of colours to match existing infrastructure and the surrounding environment.

### Please Note:

Colour represented may vary slightly to those depicted in the swatches below Nonstandard colours: Lead times may vary due to colour development and availability of raw materials.



# GROSS CAPACITY CHART (kl)

MODEL	DIAMETER (m)	NUMBER OF RINGS AND WALL HEIGHTS (m)									
		2	3	4	5	6	7	8	9	10	11
		2.14	3.17	4.20	5.24	6.28	7.31	8.34	9.39	10.41	11.45
04	2.73	12									
05	3.41	20	29	38	48	57					
06	4.09	28	42	55	68	82	96				
07	4.78	38	57	75	94	112	131				
08	5.46	50	74	98	123	147	171	196			
09	6.14	63	94	125	155	186	217	247			
10	6.82	78	116	154	192	230	267	305	343	380	418
11	7.51	94	140	186	232	278	324	369	416	461	507
12	8.19	112	167	221	276	331	385	440	495	549	603
13	8.87	132	196	260	324	388	452	516	580	644	708
14	9.55	153	227	301	376	450	524	598	673	746	820
15	10.24	176	261	346	431	516	602	687	773	858	943
16	10.92	200	297	394	491	588	685	781	879	974	1,070
17	11.60	226	335	445	554	663	773	882	993		
18	12.28	253	376	498	621	744	866	989	1,113		
19	12.97	282	419	555	692	829	965	1,102	1,240		
20	13.65	312	464	615	767	918	1,070	1,221	1,374		
21	14.33	344	511	678	845	1,012	1,179	1,346	1,515		
22	15.01	378	561	744	928	1,111	1,294	1,477	1,662		
23	15.70	413	613	814	1,014	1,214	1,415	1,615	1,817		
24	16.38	450	668	886	1,104	1,322	1,540	1,758	1,978		
25	17.06	488	725	961	1,198	1,435	1,671	1,908	2,147		
26	17.74	528	784	1,040	1,296	1,552	1,808	2,064	2,322		
27	18.43	569	845	1,121	1,397	1,673	1,949	2,225	2,504		
28	19.11	612	909	1,206	1,503	1,800	2,096	2,393	2,693		
29	19.79	657	975	1,294	1,612	1,930	2,249	2,567	2,889		
30	20.47	703	1,044	1,384	1,725	2,066	2,407	2,747	3,091		
31	21.16	751	1,114	1,478	1,842	2,206	2,570	2,934	3,301		
32	21.84	802	1,189	1,575	1,965	2,355	2,741	3,131	3,521		
33	22.53	853	1,264	1,675	2,089	2,504	2,915	3,329	3,744		
34	23.21	906	1,342	1,778	2,218	2,658	3,094	3,534	3,974		
35	23.89	960	1,422	1,884	2,350	2,817	3,279	3,745	4,212		
39	26.63				2,919	3,498	4,071	4,645	5,231		

ST & CY Range 
  ST Range Only 
  ES Range Only\* 
  ET Range\*\*

**\*Engineered Solution (ES)**

These tanks will require additional site information, and geotechnical studies and will be subject to final pricing and design confirmation.

**\*\*Elevated Tanks (ET)**

These tanks can be placed on an Elevated stand at either 6m, 10m or 15m.





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**06-SLA\_EC\_05.05.2025**

SBS Corporate Services (Pty) Ltd

P O Box 20795

DURBAN NORTH 4016

**Engineering Manager**

Att. : Mr Brendon Wortman, Engineering Manager, SBS Tanks

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**RE: STRUCTURAL CERTIFICATION LETTER:**

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We confirm that SBS Corporate Services (Pty) Ltd have supplied to us all the relevant documentation for the following tank range and variants thereof: -

1. STANDARD TANK RANGE 'ST' ST04 TO ST35
2. CYCLONIC RANGE CY04-CY31
3. ELEVATED TANK RANGE, 3 RINGS HIGH - ET05/07/10/12/14 in 3 height variants 6, 10 & 15m
4. ENGINEERED SOLUTION TANK RANGE "ES"

• VPE Engineering Services have reviewed the manufacturing documentation, previous operational records, and have completed an independent structural design assessments as required to Sound Engineering Practice and, as applicable, South African National Standards: -

- SANS 10160 – Basis of Structural Design & Actions for Buildings and Industrial Structures
- SANS 10162 – Structural Steelwork
- SANS 121 – Hot Dip Galvanized Coatings

The certification is limited to tanks complying with the following: -

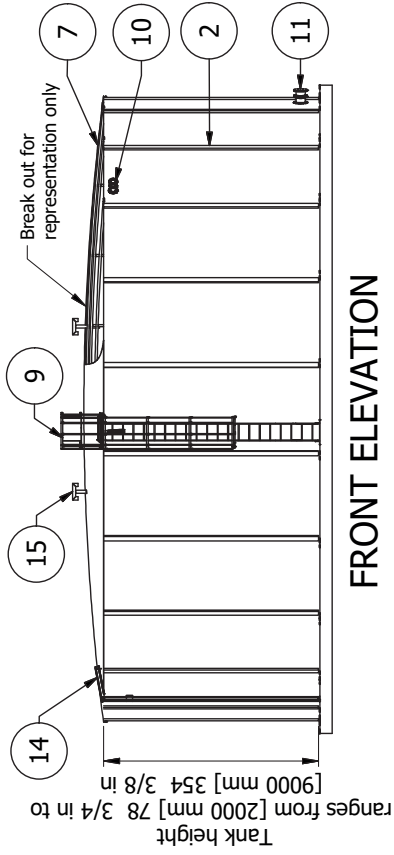
- Installation in accordance with the methods prescribed by SBS Corporate Services undertaken by competent personnel.
- Installation is limited to sites or locations which are within the environmental design limitations for wind and seismic.
- Engineered Solution tanks "ES" range and installation of single or multiple tanks on any site which may have any influence on the surrounding structures may require a review of the installation in line with national regulations.
- Foundations are to be prepared in accordance with the instructions of the approved Civil Engineering drawings.

Certification for installation of a tank other than in normal South African conditions is subject to additional and specific check design calculations for the individual location and conditions.

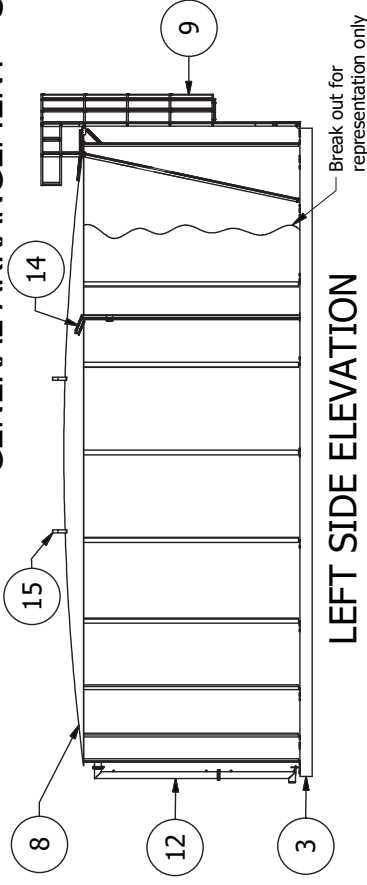
**Michael Georgiadis**

**Pr. Eng. ECSA # 20090060**

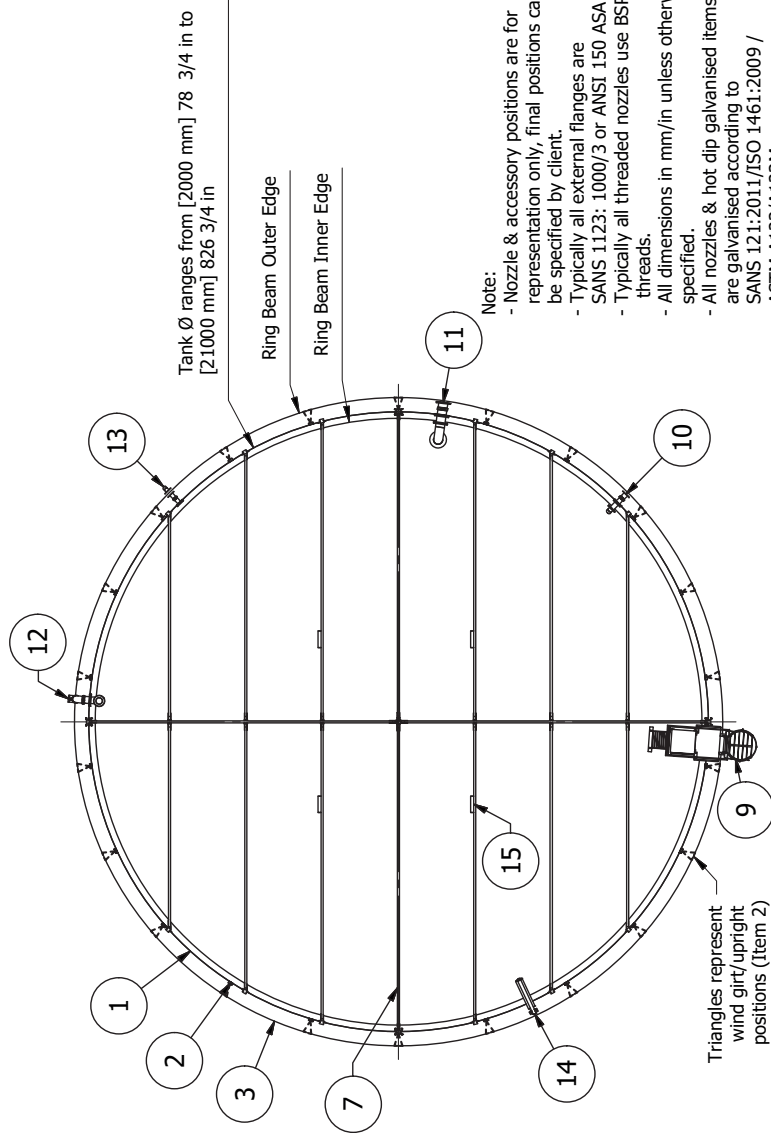
# GENERAL ARRANGEMENT - SBS TANK



FRONT ELEVATION



LEFT SIDE ELEVATION



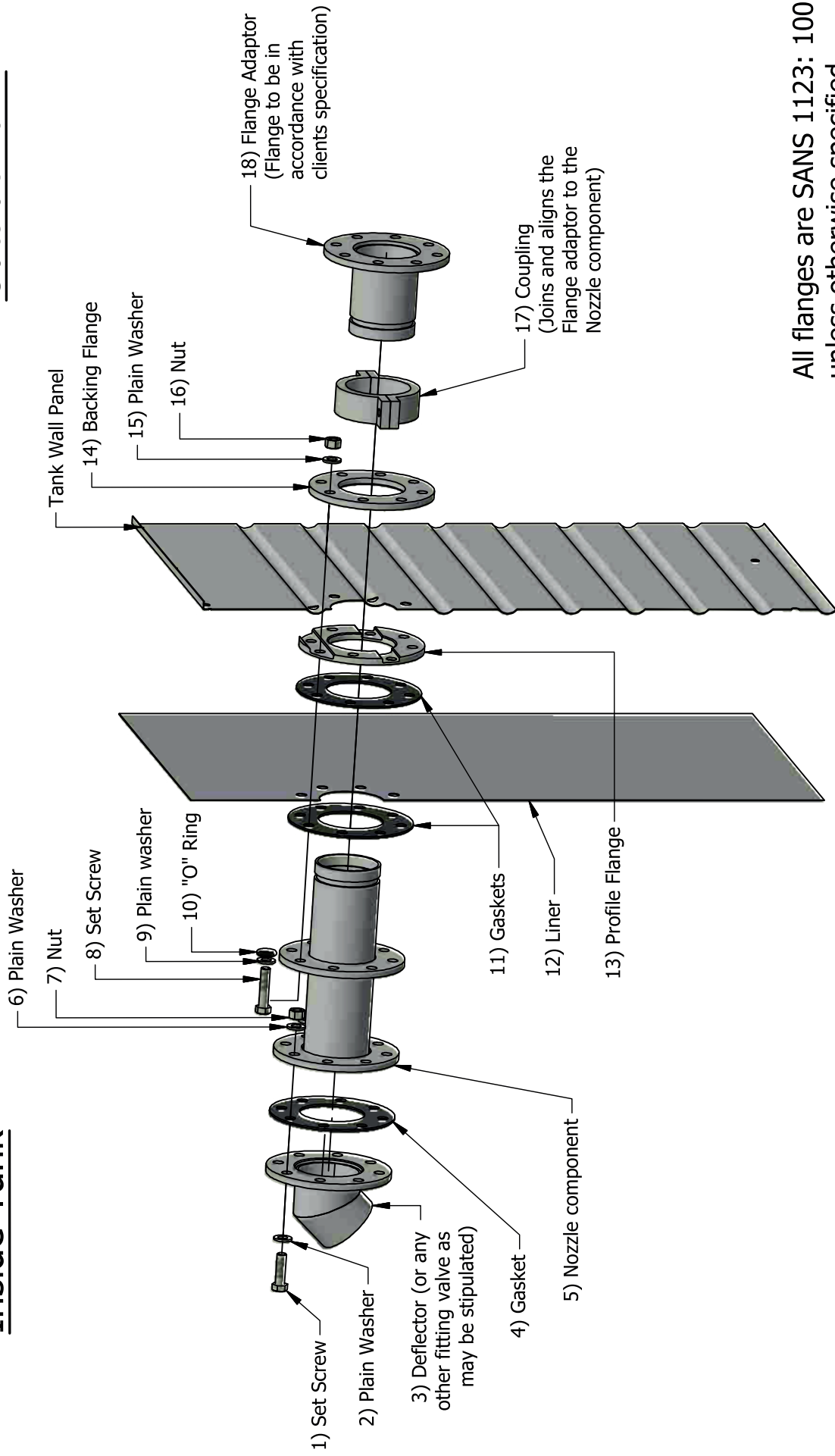
PLAN VIEW

Note:  
 - Nozzle & accessory positions are for representation only, final positions can be specified by client.  
 - Typically all external flanges are SANS 1123: 1000/3 or ANSI 150 ASA  
 - Typically all threaded nozzles use BSP/NPT threads.  
 - All dimensions in mm/in unless otherwise specified.  
 - All nozzles & hot dip galvanised items are galvanised according to SANS 121:2011/ISO 1461:2009 / ASTM A123/A123M.  
 - Drawing not to scale.

TANK & ACCESSORIES PARTS LIST		
ITEM	PART NUMBER	DESCRIPTION
1	Tank Wall Panels	Galvalume steel panels, steel grade G300, with AZ150 heavy duty coating. Panels are bolted together using class 8.8 HDG hex head flanged screws & nuts.
2	Wind Girts/Uprights & Covers	Wind Girts are made from [2.4 mm] 3/32 in hot dipped galvanised sheet metal, punched and bent into profile. Reinforced, 25 MPa min.
3	Concrete Ring Beam	L shaped brackets complete with expansion type anchor bolts.
4	Tank Hold Down Brackets c/w Anchor Bolts	Fits between concrete ring beam/sand bed and PVC Liner/membrane.
5	Polyester Geotextile	Potable water liner/bladder consisting of high tenacity polyester yarn coated on both sides with PVC. The SBS [720 g] 1.54 lbs potable propriety liner meets AS/NZS 4020-2005.
6	Liner	Fabricated from SHS & EA steel, 355 MPa min. Hot dipped galvanised after fabrication.
7	Roof Truss Set	Galvalume corrugated sheets, [0.47 mm] 1/32 in thick, grade G550, with AZ150 coating.
8	Dome Roof	Fixed, complete with internal & external ladders, safety cage with lockable door, platform, [600 mm] 23 5/8 in lockable access hatch, & hand rails.
9	Roof Tank Access	Internal deflector, external flange.
10	Typical Inlet	Internal anti-vortex, external flange.
11	Typical Outlet	Internal bell mouth, external downpipe with roll groove termination.
12	Typical Overflow	External flange c/w geared butterfly valve & deflector.
13	Typical Dump Drain	Mechanical (True Read Type)
14	Typical Water Level Indicator	Static, made from [76 mm] 3 in x [76 mm] 3 in SHS.
15	Typical Ventilator	

# Inside Tank

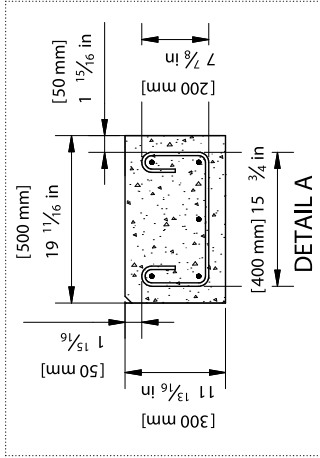
# Outside Tank



All flanges are SANS 1123: 1000\3 unless otherwise specified

## GUIDELINES AND NOTES

- This document contains the minimum required dimensions and guidelines and is not to be used for construction unless officially issued by an approved engineer or company representative.
- SBS is not responsible for any loss or damage caused by an incorrectly designed or built ring beam.
- Ring beam sizes shown are suitable for geographic areas which do not experience wind speeds exceeding 43 m/s (155 km/h) 96 mph. Should wind speeds in excess of this be expected, then special designs must be prepared.
- It is very important for the client to ensure that foundation conditions are adequate. The requirements are
  - Safe bearing capacity should equal or exceed 14.5 PSI [100 kPa]
  - The founding material must be stable
  - Hand float top surface
- Most sands and gravels that have been compacted to a reasonable level will be adequate, provided that there is stable soil underneath.
- Should there be any doubt about the stability or strength of the foundation, site specific professional engineering advice should be sought.
- In areas with corrosive soil conditions, special protective measures should be used.
- Ring beam dimensions are typical and provided for costing purposes only. Final ring beam dimensions may vary depending on soil conditions, climatic conditions, etc.
- Ring beam width and depth are tank model dependant and allow for specialised jacking when required. Ring beam dimensions must not be altered for any unapproved reason and without any consultation from the supplier.
- Drawing is not to scale



Clean Fill; Free Of All Debris Such As Rocks, Sticks, etc.

Concrete Compressive Strength [25MPa Min]

[50 mm] 1 15/16 in Concrete Cover To Reinforcement

Chamfer Internal Edge

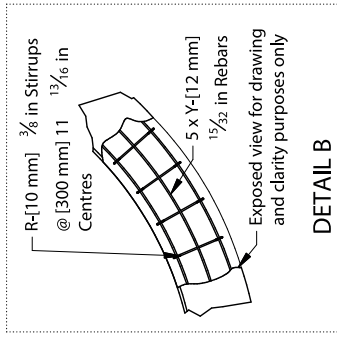
Internal lightly compacted sand bed 3 15/16 in [100 mm] deep

A

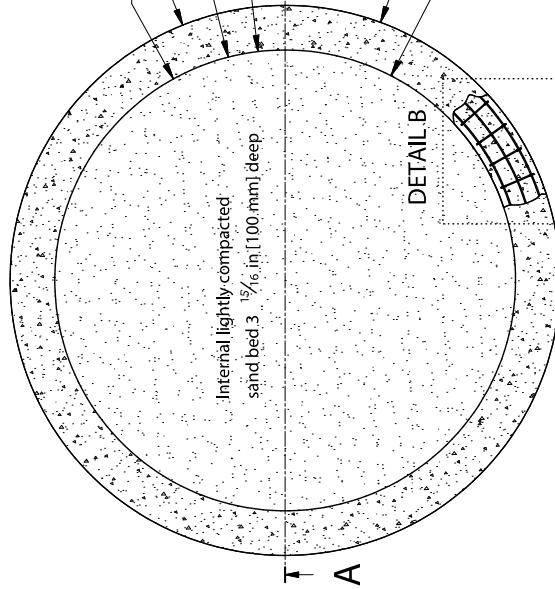
Outer Diameter Ø

Inner Diameter Ø

DETAIL B



### SECTIONAL FRONT VIEW ON A-A



### PLAN VIEW



### Construction Tolerances

Outside Ø: - 25/32 in [20 mm]

+0

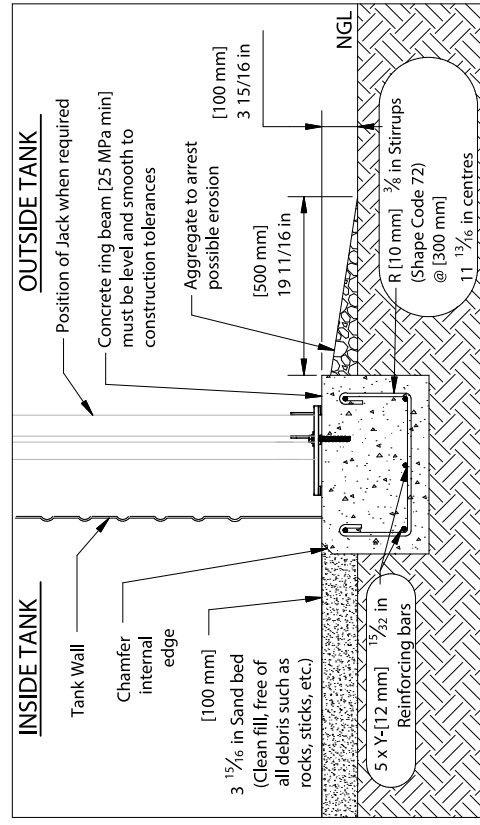
Inside Ø: - 0

+ 25/32 in [20 mm]

Level of top surface: ± 5/64 in [2 mm] over any 78 47/64 in

[2 m] of circumference at tank wall position. ± 5/32 in

[4 mm] over entire ring beam.



### FINISHED RING BEAM DETAIL

# SBS TANKS® COMPLETED PROJECTS



## FIXED FIRE PROTECTION

**TANK MODEL:** 2x ST 15/06

**TOTAL CAPACITY:** 1,034 kl

**LOCATION:** Kenya, East Africa

## PUBLIC SECTOR

**TANK MODEL:** 3x ST 31/09

**TOTAL CAPACITY:** 9,903 kl

**LOCATION:** Emalaheni, Mpumalanga



## MINING

**TANK MODEL:** 2x ST 31/09

**TOTAL CAPACITY:** 6,604 kl

**LOCATION:** Northern Cape, South Africa



## WATER CONSERVATION

**TANK MODEL:** 1x ST 06/02

**LOCATION:** Building rooftop, Cape Town, South Africa



## COMMERCIAL

**TANK MODEL:** 1x ST26/05

**TOTAL CAPACITY:** 1,295 kl

**LOCATION:** Texas, United States of America



## ELEVATED, PUBLIC SECTOR

**TANK MODEL:** 1x ET 05/03 at 6m

**TOTAL CAPACITY:** 29 kl

**LOCATION:** KwaCutshwayo, KZN





**We Build For Better.  
We Work Smart. We Commit Wholeheartedly.**



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