

FM Approved Fire WaterTank



Looking for a safe, compliant, and long-lasting storage solution? It's here. Our FM 4020-approved GI bolted storage tanks are engineered to meet the highest standards of safety, durability and performance. Designed for storing water, chemicals and other industrial liquids, these tanks are also a critical component for fire protection systems - ensuring you stay fully compliant with fire safety regulations. Reliable, efficient, and built to last - they're not just a solution, they're a necessity.

FM 4020 Certification

FM 4020 ensures tanks meet high standards for fire resistance, structural integrity, and corrosion resistance, offering peace of mind for safe storage. **Approval Identification: PR456023**



The Significance of FM 4020

Safety and Reliability: By adhering to FM 4020, manufacturers and users can be confident that the steel tanks used for fire protection meet the required standards for safety and reliability.

Property Conservation: The standard is designed to help prevent property loss due to fire by ensuring that fire protection systems, including water storage tanks, are up to the required standards.

FM Approval: Products that meet the requirements of FM 4020 are considered "FM Approved" and are marked as such, indicating they have been tested and certified to meet the standards.

Applications

01

Fire Water Storage

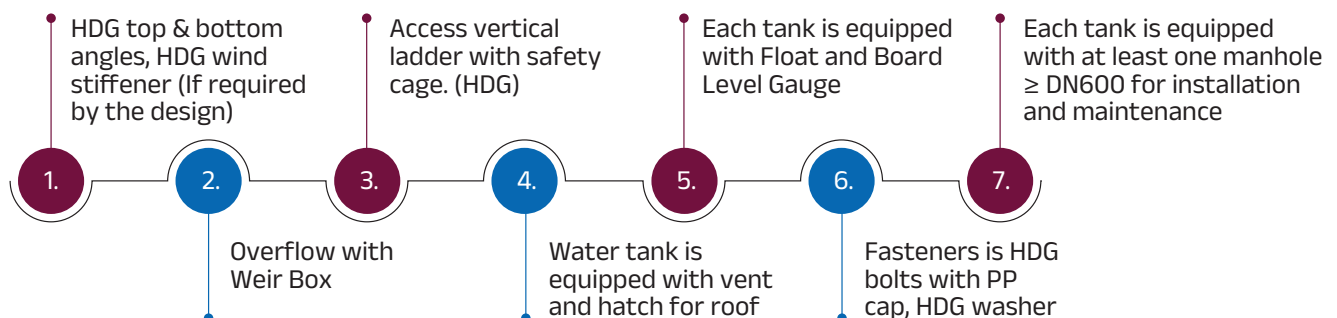
02

Treated Water

03

Raw Water

OTHER SPECIFICATION



FM Approved Tank Technical Datasheet

General Specification

Item name	SFM Series Shubham Fire Water Tank
Geometry	Cylindrical
Foundation type	Ring Beam Foundation, Concrete Bed Foundation.
Steel panel thickness range	Minimum Thickness - 2.4 mm
Panel material	GI - ASTM-A653, CLASS I -50, GI sheet (350 GSM GI) / IS2062 E- 350A (Coated Sheet)/IS 2062 BSK46 (Coated Sheet)
Yield stress of steel plate	320~360Mpa
Tensile strength of steel plate	420~460 N/mm ²
Freeboard	As per FM Design
Roof type	HDG Trusses, Zincalume Dome Roof / Galvalume Dome roof
Yield & Tensile strength	550 Mpa & 570 Mpa
MOC of Liner	Japanese manufactured Multi-layered PE with PP reinforced scrim and Metallocene contact layer Standards & Certification: IS: 9845- 1998 (Indian) ANSI/ NSF 61 (American) AS/NZS 4020: 2005 (Australian) AS/ NZS 1170 -2007, 4100, 4600
Liner strength	Tensile Strength : Warp 2540N Weft 2600N Tear Strength : Warp 264N Weft 299N Heat Sealing : Strength 2269N 5 Peeling Strength : 68N
Water Head Test	729 KPa
Sealant	Polyurethane sealant for food grade Silicone sealant for non-food grade
Abrasion resistance	50,000 cycles of abrasion strokes
Bottom protection of liner	Geo Synthetic Fabric
Tank colour	Natural GI
Tank volume	From 38m ³ to 602m ³
Installation tools	Steel pole with chain block or Hydraulic Jack

Design Criteria

Design code	FM 4020
Panel size	2500mm x1250mm
Wind load	118 mph or 189 kmph
Roof Load	15psf or 0.75 kpa
Seismic load	EQ zone 250 years. The tank may also be erected in less critical EQ zones 500 years and >500 years.
Fluid Temperature	15~60 Degree C.
pH Range	3~11
Other Inclusions	Double Anchor Chairs, HDG Vertical Ladder with safety cage, Overflow with weir box, Vent and hatch for roof, Float and board level gauge, HDG bolts with PP caps, 600mm manway and HDG wind stiffener