

Model STS

Emergency Water Tempering Skid System



APPLICATION:

Acorn Safety's water tempering system provides usable tempered water immediately in an emergency, where time delays in receiving proper irrigation of hazardous material exposure can increase the severity of trauma and/or injury. Acorn Safety offers tank and valve size options that are able to supply multiple showers, eye/face washes and eyewashes simultaneously. All of Acorn Safety's water tempering systems, when located in a reasonable proximity to possible work place exposure, provide an environment conducive to quick and proper length of treatment, in accordance with ANSI Z358.1, Appendix B6.

SPECIFICATIONS:

Valve Specifications:

Maximum Operating Pressure: 125 PSI (861 kPa)
 Maximum Hot Water Supply Temp: 180°F (82°C)
 Outlet Temp. Range: 60°F-95°F (15°C-35°C)
 Minimum Hot Water Supply 5°F (3°C)
 Above Set Point

NOTE:

SEE ACORN SAFETY ET71 SERIES VALVE SUBMITTAL SHEET FOR ADDITIONAL VALVE SPECIFICATIONS

Expansion Tank:

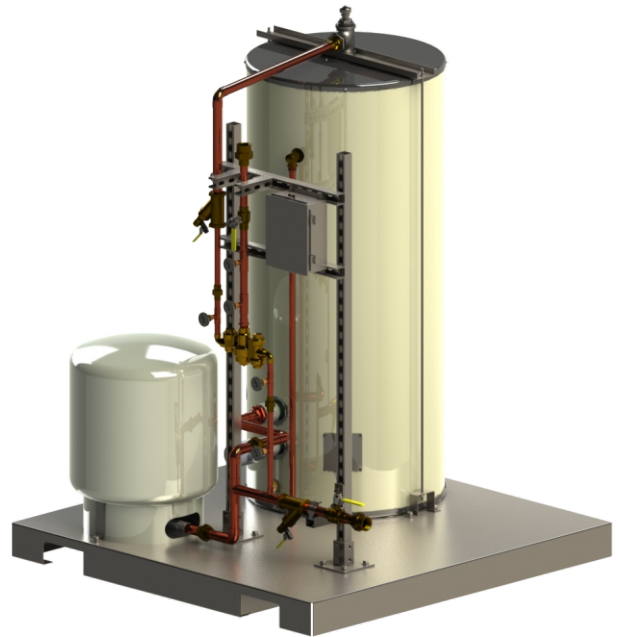
Volume 32 Gal (121 L)
 Maximum Pressure 40 PSI (276 kPa)

Water Heater Tank:

Capacity 120 Gal (454 L)
 Maximum Working Pressure 125 PSI (861 kPa)

Heating Element:

Thermostat 60°F-250°F (16°C-121°C)
 Power Requirements 240 VAC
 Power 5.477 kW



FEATURES:

- 5' x 5' All stainless steel constructed skid for corrosive environments.
- 120 gallon **NON** ASME tank with ET71-2 tempering valve standard. 120 and 300 gallon ASME tanks optional available. 300 gallon tank will include ET71-3 tempering valve.
- Utilizes Acorn Controls ET71 Series tempering valves which are IAPMO certified per ASSE 1071 and CSA B125.3.
- Electrical components in NEMA 4 standard, or optional NEMA 7 classifications.
- Heating element with integral high temperature shut-off.
- 15' (4.5 m), 10 gage, 4 wire power cord with 3", 4 blade twist-lock connector.

GUIDE SPECIFICATION:

Emergency water tempering system shall be mounted to a 5' x 5' stainless steel skid. Tempering system shall include a tempering valve that shall be independent lab certified to ASSE 1071 and CSA standards. Valve shall have an on demand internal cold water bypass of at least 60% of the normal flow rate with a temperature range of 60°F to 95°F (16°C or 35°C) factory set to 85°F (29°C) and adjustable by the safety officer. Hot water tank shall be constructed to ASME standards with an electrical heating element with an integral high temperature limit shut-off. All electrical components shall be single phase NEMA 4 (standard) or NEMA 7 (optional) classifications. Every tempering system shall be factory assembled and tested.



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Product

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Submittal **STS**
Revised: 09/22/17

Product carries the following certifications:



C
ASSE 1071
CSA B125.3



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Morris Group International™

ACORN SAFETY

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OPTIONS:

- STS-1 120 Gallon **NON** ASME Tank (Standard) With ET71-2 Tempering Valve
- STS-1A 120 Gallon ASME Tank With ET71-2 Tempering Valve
- STS-3 300 Gallon ASME Tank With ET71-3 Tempering Valve
- NEMA 7 Class Components
 - Division 1
 - Division 2
- Booster Pump
Manufacturer and Model Number: _____
- Recirculation Pump



PUMP INFORMATION:

Manufacturer: _____

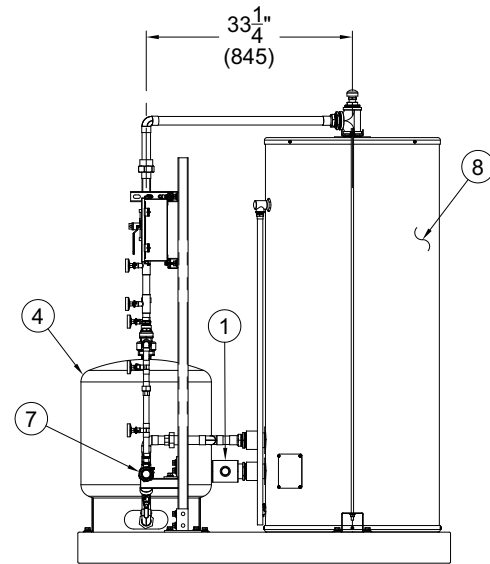
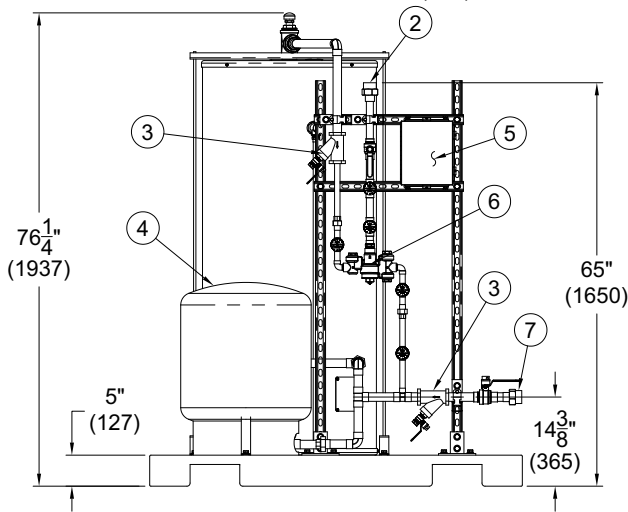
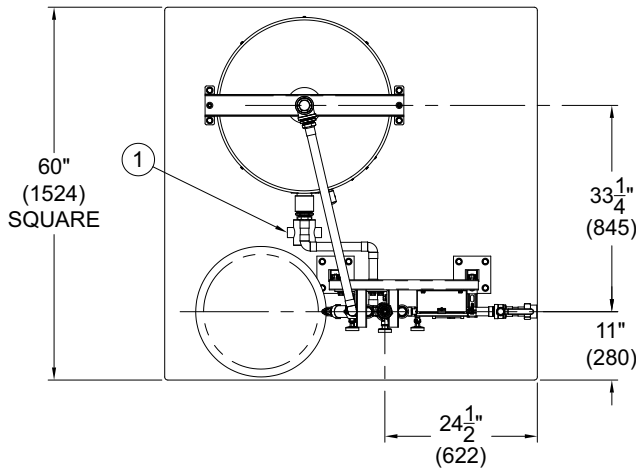
Manufacturer Part Number: _____

IF PUMP NOT SPECIFIED ABOVE, MUST PROVIDE THE FOLLOWING

System Head Loss: _____

Required Flow: _____

TECHNICAL DIMENSIONS:



NOTES:

- ① ELECTRIC HEATING ELEMENT
- ② 1" NPT OUTLET CONNECTION
- ③ "Y" STRAINERS
- ④ EXPANSION TANK
- ⑤ ELECTRICAL CONTROL BOX
- ⑥ ET71 SERIES TEMPERING VALVE
- ⑦ 1" NPT SUPPLY INLET
- ⑧ WATER HEATER TANK

⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Revised: 09/22/17 **STS**

Acorn Safety warrants that its products are free from defects in material or workmanship under normal use and service for a period of one year from date of shipment. Acorn's liability under this warranty shall be discharged solely by replacement or repair of defective material, provided Acorn is notified in writing within one year from date of shipment, F.O.B. Industry, California.

SELECTION SUMMARY & APPROVAL FOR MANUFACTURING

Model Number & Options _____ Quantity _____

Company _____

Contact _____ Title _____

Signature
(Approval for Manufacturing)

Date _____



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or 626-855-4804
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