

DELTA-FIN™ SF

High-Output Finned Pipe

The DELTA-FIN™ SF aluminum finned pipe heating system relies on natural convection to heat the greenhouse.

This system uses water temperatures up to 230° F to heat the air around the fin tube and distribute it to plants. The high output finned pipe is made of sch 40 aluminum pipe and fins that are twice as thick as standard base board radiators. This heavy duty construction guarantees long life in a harsh environment and allows the material to be hung from greenhouse columns spaced as far as 12 feet apart without additional center support.

Placed around the perimeter or under the gutter, this material emits enough energy to heat a greenhouse range, melt snow from the gutters or supplement under bench heating systems.

Two sizes (1.25" and 2.0") allow for various design considerations that might come up when designing long runs or small temperature differentials requiring high flow rates.

Grooved coupling technology absorbs enough expansion from heated aluminum pipe to eliminate special expansion joints in most installations. Special fin configurations can be provided for under gutter snow melt or corridor heating.

Typical fin spacing: 1.25" 24 fins/ft
 1.25" 48 fins/ft
 2.0" 24 fins/ft



DELTA-FIN™ SF advantages:

- Lightweight aluminum construction allows for hanging material from columns or truss without special supports.
- Heavy-duty fins able to withstand high traffic areas.
- Rugged construction can be supported on 12-foot OC brackets.
- Grooved coupling technology for easy installation. Requires NO threading or welding.
- Grooved coupling eliminates expansion joints.
- High output per foot reduces need for multiple tiers.
- Special fin spacing is available for optimum heat output.

Delta T Solutions can provide a performance engineered heating system that can meet the needs of any grower. Performance packages include: Heating system components (heat source, controls, radiation), performance engineered drawings (pipe layouts and electrical diagrams), installation supervision and installation (as required).

Specifications:

The radiating material is the DELTA-FIN™ SF125 or SF200 aluminum finned pipe and consists of the following:

- 1.25" sch 40 aluminum pipe with 3.25" by 3.25" by 0.025" aluminum fins at 24 or 48 fin/foot. Pipe shall have each end grooved to accept the cast-aluminum grooved coupling provided.
- 2.0" sch 40 aluminum pipe with 4.25" by 4.25" by 0.025" aluminum fins at 24 fin/foot. Pipe shall have each end grooved to accept the cast-aluminum grooved coupling provided.
- Cast-aluminum coupling shall be grooved style with high temperature gasket rated for -60°F to 230°F.
- Cast-aluminum coupling and external grooved fin system absorbs expansion from heated aluminum.
- All-aluminum hanger brackets.
- Pressure ratings of 125 PSI at 230°F.
- Heavy-duty cover system including necessary assemblies.

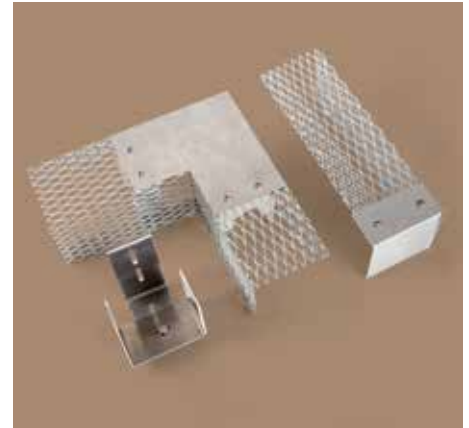
DELTA-FIN™ SF



DELTA-FIN™ SF-125



Aluminum Elbow and Couplers



DELTA-FIN™ SF Cover System

DELTA-FIN™ SF Ratings

Tube Size and Material	Fin Size and Material	Fins/ Foot	No. of Tiers 7" oc	Steam Rating	SF - BTU/HR/FT Output (Average Water temperature)														
					100°	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°	220°	230°	240°
				Factor	0.151	0.2	0.26	0.33	0.4	0.45	0.53	0.61	0.69	0.78	0.86	0.95	1.05	1.14	1.25
1.25" Sch 40 Aluminum	3.25" x 3.25" 0.025 Aluminum	48	1	1850	279	370	481	611	740	833	981	1129	1277	1443	1591	1758	1943	2109	2313
			2	2775	419	555	722	916	1110	1249	1471	1693	1915	2165	2387	2636	2914	3164	3469
			3	3538	534	708	920	1168	1415	1592	1875	2158	2441	2760	3043	3361	3715	4033	4423
1.25" Sch 40 Aluminum	3.25" x 3.25" 0.025 Aluminum	24	1	1140	172	228	296	376	456	513	604	695	787	889	980	1083	1197	1300	1425
			2	1824	275	365	474	602	730	821	967	1113	1259	1423	1569	1733	1915	2079	2280
			3	2326	351	465	605	767	930	1047	1233	1419	1605	1814	2000	2209	2442	2651	2907
2.00" Sch 40 Aluminum	4.25" x 4.25" 0.025 Aluminum	24	1	1630	246	326	424	538	652	734	864	994	1125	1271	1402	1549	1712	1858	2038
			2	2445	369	489	636	807	978	1100	1296	1491	1687	1907	2103	2323	2567	2787	3056
			3	3117	471	623	811	1029	1247	1403	1652	1902	2151	2432	2681	2962	3273	3554	3897

Maximum water velocity - 4.0 ft/sec. Minimum water flow for rated outputs - 4 gpm. Increase outputs by 5% - Installed in slope top inclosure. Decrease output by 3% - Installed in expanded metal inclosure. Maximum water pH 9.0.

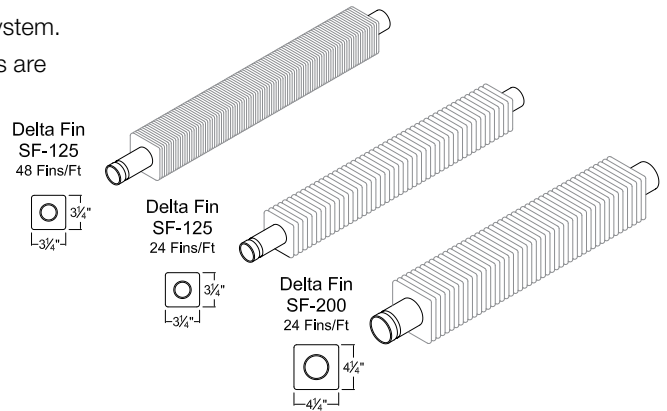
Contact your local Delta T Solutions Representative for additional details.





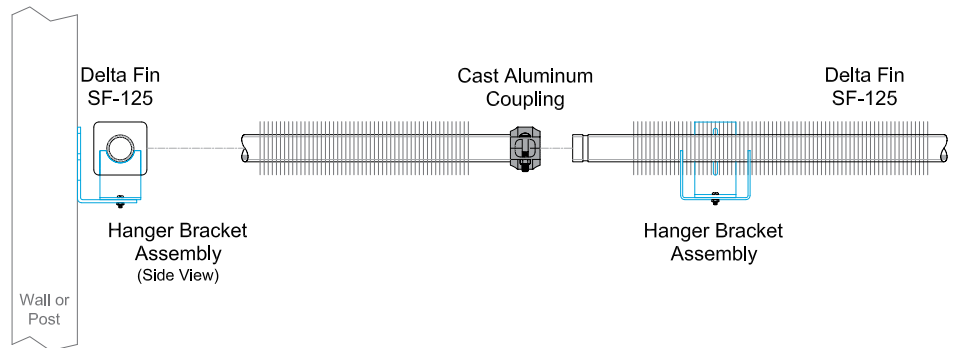
DELTA-FIN™ SF-125 and SF-200

DELTA-FIN™ SF is a high-output schedule 40 grooved aluminum fin pipe system. Standard configurations include 24 or 48 fins /ft. (Custom fin configurations are available.) DELTA-FIN™ SF can span up to 12 ft. without center support, and is available with exclusive Delta T Solutions aluminum couplers and aluminum elbows.



DELTA-FIN™ SF Hanger System

Use the versatile aluminum hanger bracket assembly to secure DELTA-FIN™ SF to walls or posts.



DELTA-FIN™ SF Cover System

Our fin cover system (available in aluminum or stainless steel) can be configured to protect and enhance DELTA-FIN™ SF installed in most any room design.

