## **Design and Installation Guide**

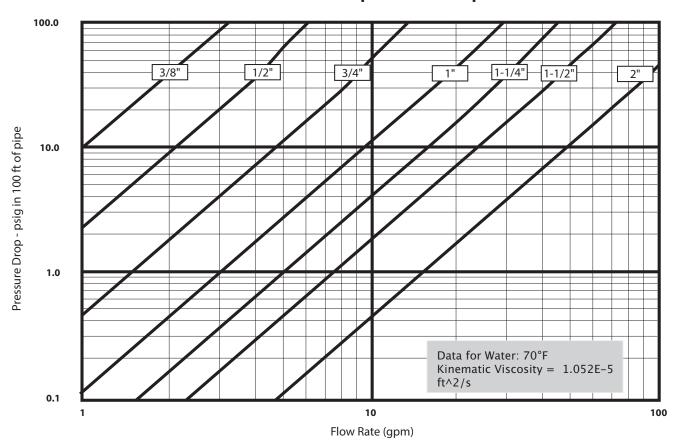


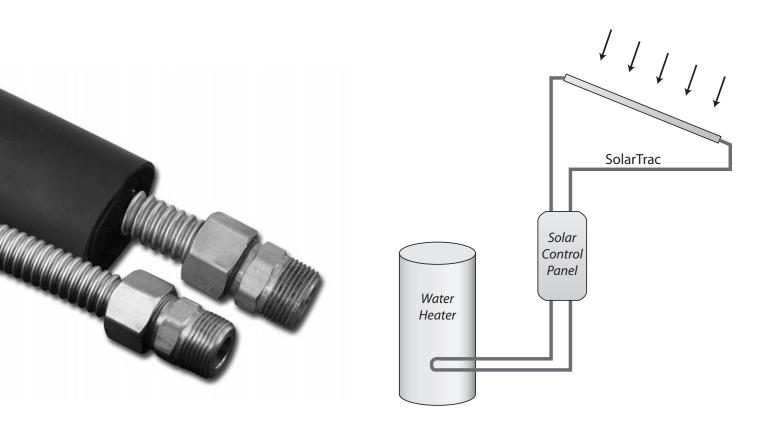
# **Piping for Solar Thermal Hot Water Systems**





### Solar-Trac® Pressure Drop in 100ft of Pipe





#### Assembly of Solar-Flare™ Fittings to Solar-Trac®

If purchased with insulation, start at Note 1 below; without insulation start at Note 2.

- 1. REMOVE INSULATION FOR FITTING ATTACHMENT: After measuring for length, cut through the black insulation layer using a utility knife. Remove about four inches to provide a two inch length of bare corrugated tubing on each side of the length cut. Use care to avoid any damage to the corrugated tubing while removing insulation.
- 2. PRECISION CUT: Cut through stainless tube using a tube cutter with a sharp wheel. Cut must be centered between two corrugations. Use full circular strokes in one direction and tighten roller pressure slightly (a quarter turn) after each revolution. DO NOT OVERTIGHTEN ROLLER, which may flatten tube.

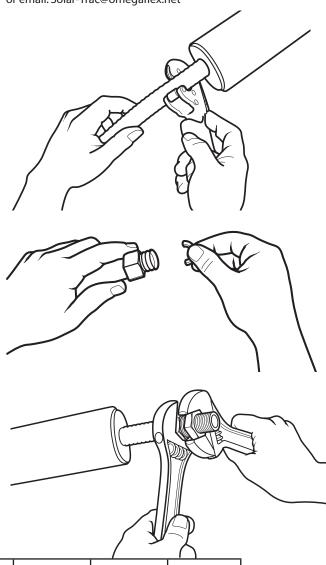
NOTE: Due to the large diameter and depth of corrugation on sizes over 1″, tubing must be cut with a standard tubing cutter RIDGID™ 152 or equal using cutting wheel P/N E-5272 or equal. CAUTION: Use of a small cutting wheel may flatten the first corrugation and make cutting and/or sealing of Solar-Flare fittings difficult.

- **3. INSTALL FITTING NUT:** Slide nut over cut tube end: place two split-rings into the first corrugation next to the tube cut. Slide nut forward to trap the rings.
- **4. WRENCH FITTING:** Place the adapter into the nut and engage threads. Note that the Solar-Flare fitting is designed to form a leak tight seat on the stainless tubing as you tighten the fitting. (The piloting feature of the adapter will not always enter the bore of the tubing before the tightening operation, but will center the fitting when tightened). Using appropriate wrenches, tighten the fitting until adapter bottoms and the resistance to wrenching increases greatly. The flare has now been created on the tubing end.

CAUTION- DO NOT USE ANY THREAD SEALANTS FOR THIS CONNECTION. SEALANTS ARE TO BE USED ON THE PIPE THREAD ONLY.

**5. FINAL TORQUE:** Tighten nut and adapter using the following method: Tighten nut and adapter as though you were making up a flared tubing joint. Note relation between hex flats at this point and continue to tighten for two additional hex flats (one-third turn) to obtain required torque and final leak-tight seal.

For questions or technical information, please call 1-800-355-1039 or email: Solar-Trac@omegaflex.net



	3/8" (DN10)	1/2" (DN15)	3/4"(DN22)	1" (DN28)	1-1/4"(DN35)	1-1/2"(DN40)	2"(DN50)
MAWP(PSI)	125	125	125	125	125	55	55
SS wall							
Thickness	.010"	.010"	.010"	.010"	.012"	.012"	.012"
Nominal ID (inch)	.441"	.599"	.820"	1.060"	1.290"	1.525"	2.060"
Nominal Bare SST Piping OD (inch)	.600"	0.788"	1.040"	1.315″	1.600"	1.840″	2.415″
Nominal Insulated SST Piping OD (inch)	2.00"	2.353″	2.635″	2.954"	3.150″	3.181″	3.756″
Vol (gal/ft)	0.011	0.020	0.035	0.058	0.085	0.115	0.204
Min Bend Radius (inch) No Insulation	.75″	.75″	1.00"	3.00"	3.00"	3.00"	4.00"

#### **About OmegaFlex®**

Established in 1975, OmegaFlex supplies quality-engineered flexible metal piping products for highly-engineered industrial, residential, and commercial applications. Our diverse line of products include flexible metal piping, braid, braided-hose-on-reels, TracPipe®, AutoFlare®, Solar-Flare™, CounterStrike®, DoubleTrac®, and now Solar-Trac®. The OmegaFlex name and reputation was built through outstanding engineering support and product design, excellent customer service, fully-stocked inventory, and on-time delivery. Our experienced Customer Service Department, working in conjunction with the Field Sales Support Group and Engineering Staff, will assist in meeting your specific application and delivery requirements. Utilizing innovative manufacturing technologies, OmegaFlex produces the highest quality and most cost effective solutions to the industry.

As a result of our registration to ISO9001, all new products are subject to complete design review, validation and verification prior to product release. In compliance with our quality program, design and testing, documentation is maintained on all existing and new products manufactured by OmegaFlex. This dedication to safety and value insures that you receive only the finest and most economical products in the market.

OmegaFlex's® philosophy is to:

- Provide our customers quality products through teamwork and continuous improvements
- Strive for zero defects in our products
- Create an environment that allows OmegaFlex® continuous and prosperous growth
- Provide a positive working environment with progressive training
- Stress quality awareness and its benefits to our customers and employees
- Empower our employees to perform to the best of their abilities

#### **SOLAR-TRAC® FLEXIBLE PIPING LIMITED WARRANTY**

We warrant to the original owner at the original installation site that the SOLAR-TRAC® flexible piping (the "Product") will be free from defects in material or workmanship for one year from the date of installation. If we determine upon examination that the Product has a defect in material or workmanship during the warranty period, we will repair or replace, at our option, that part of the Product which is shown to be defective.

This limited warranty does not apply:

- if the Product has been subjected to misuse or neglect, has been accidentally or intentionally damaged, has not been installed, maintained or operated in accordance with the furnished written instructions, or has been altered or modified in any way.
- to any expenses, including labor or material, incurred during investigation, removal or reinstallation of the defective Product or parts thereof.
- to any damage or impairment of the Product caused by any casualty, including without limitation fire, wind, floods, or acts of God.
- to any workmanship of the installer of the Product.
- to any components of the flexible piping system not furnished by SOLAR-TRAC®

This limited warranty is conditional upon:

- shipment to us of that part of the Product thought to be defective. Goods can only be returned with prior written approval from our customer service department. All returns must be freight prepaid.
- determination that there exists a defect in material or workmanship.

Repair or replacement of any part under this Limited Warranty shall not extend the duration of the warranty with respect to such repaired or replaced part beyond the stated warranty period.

This limited warranty is in lieu of all other warranties, either express or implied, and all such other warranties, including without limitation implied warranties of merchantability or fitness for a particular purpose, are hereby disclaimed and excluded from this limited warranty.

In no event shall we be liable in any way for any consequential, special, or incidental damages of any nature whatsoever, or for any amounts in excess of the selling price of the Product or any parts thereof found to be defective. This limited warranty gives the original owner of the product specific legal rights. You may also have other rights which may vary by each jurisdiction.

www.omegaflex.com



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