



# Solar Neighbourhoods

138 Hamilton St. • Toronto ON M4M 2E1 • 416-392-6795

## SDHW System Inspection Form

Project/Homeowner Name: \_\_\_\_\_

Project #: \_\_\_\_\_

Date: \_\_\_\_\_

Contractor: \_\_\_\_\_

Inspector: \_\_\_\_\_

In Attendance: \_\_\_\_\_

Approx Install Date: \_\_\_\_\_

### Type of System

Closed Loop

Drain Back

Drain Down

Thermosyphon

Other

### Type of Collectors

Flat Plate

Evacuated Tube

### Site Conditions

	In Appl'cn	Inspection
Solar collector azimuth from due south		
Solar collector tilt from horizontal		
Collectors unshaded, no new growth of trees or bushes		
Shade Analysis Done		

Item	Yes/OK	No/Repair	N/A	Comment	Action Required
<b>Collectors</b>					
Glazing unbroken, clean (do not clean when hot)					
Frames tight, no evidence of corrosion, square					

Item	Yes/ OK	No/ Repair	N/A	Comment	Action Required
Seals and gasket not deteriorating, complete					
Interior insulation in place, dry, not deteriorating					
Mounting hardware secure to collectors and roof					
Roof penetrations sealed and tight					
Lightning protection (if used) is secure					
Flow rate balanced throughout array					
Sensor wires secure					
Sensor secure, in good contact with absorber plate					
Type of collector is as specified					
# of collectors as specified					
Safe and easy access for repairs/maintenance					
No leakage from collectors					
Collectors are sloped for drainage					
<b>Exterior Piping</b>					
Insulation complete, weatherproof, secure					
Hangers supporting piping properly without stress					
No evidence of leakage					
Air vents at high points c/w loosened caps					
Pipe runs are sloped if required for drainage					
Adequate space for repairs/maintenance					
Corrosion protection between dissimilar metals					
Drain valves at low points and accessible					
<b>Interior Piping</b>					
Insulation complete, secure - on solar loop					
Insulation complete, secure - solar to back up tank					
No evidence of leakage					
Check valves in correct position and orientation					

Item	Yes/ OK	No/ Repair	N/A	Comment	Action Required
Hangers supporting piping properly without stress					
Anti-scald valve installed					
Drain valves at low points and accessible					
Expansion tank (if closed system) installed					
Adequate space for repairs/maintenance					
Corrosion protection between dissimilar metals					
Valves correct type and direction					
by pass valves are piped correctly					
Backflow preventer installed and has inspection test tag					
<b>Pumps</b>					
Electrical connections secure					
Piping connections secure, no evidence of corrosion					
Pump properly supported					
Flow rate in appropriate range					
Adequate lubrication supplied (dry rotors only)					
Plumbed in proper direction					
<b>Heat Exchanger</b>					
No evidence of corrosion at fittings					
Piping connections secure					
Anode in water manifold present					
Temperature differences appropriate					
Water level (in drainback tank if used) is correct					
heat exchanger visible leak detection					
Plumbed correctly					
<b>Closed Loop Fluid</b>					
Adequate pressure					
Glycol pH, alkalinity and concentration acceptable					

Item		Yes/ OK	No/ Repair	N/A	Comment	Action Required
	No direct Make up water supply					
	Manual fill valve and drain for glycol loops					
	Relief valves discharge to appropriate location					
<b>Controls</b>						
	Electrical connections secure					
	Controls securely mounted					
	On/off differential correct					
	Sensor wires secure, unbroken, not shorted or kinked					
	120/240 V wiring at least 1 ft from sensor wires					
	Sensor resistance appropriate					
	Cable shield (if used) grounded to cabinet only					
	All electrical (including pump) is properly grounded					
	Outdoor instruments/controls are weatherproofed					
<b>Storage Tanks</b>						
	Drain valve opens and closes properly					
	Insulation complete, tight and dry					
	No evidence of leakage					
	Dielectric fittings where needed, no corrosion					
	Sensor wires secure					
	Sensor secure, in good thermal contact with tank wall					
	Heating element wiring (if used) is secure					
	T&P not blowing off, load still using heat					
	Adequate access for repairs/maintenance					
	Safety All hot surfaces (+120F) labelled to prevent burns					
<b>Monitoring</b>						
	Basic - Pump run odometer					
	Basic - Tank temperature thermometer					

Item	Yes/ OK	No/ Repair	N/A	Comment	Action Required
Advanced					
<b>Miscellaneous/Other</b>					
Photos taken					
structural review					
electrical review					
Installation/Operation/Maintenance manual on site					
Manufacturer's literature on site					
Homeowner instructed on system basics					
Homeowner comments					
Building Permit on site					