



Solar Neighbourhoods

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

Documentation for Development of Standard Drawings for Compliance with the Ontario Building Code

This provides guidelines for Professional Engineers to develop stamped drawings and a letter of conformance for SDHW systems. Please see the document: "Documentation for SDHW Certified Plan Review" for Toronto Building's submission requirements.

Contractor Contact Information	
Business Name:	
Name of Contact for Technical Information on the SDHW System:	Phone #:

Product Name (this will be the reference name for this product)	
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SDHW Standard Drawings Required	
Check off all items for which a stamped drawing and letter of conformance need to be developed.	
<input type="checkbox"/> Mechanical (if not certified to CSA F379)	<input type="checkbox"/> Structural (sloped roof)
<input type="checkbox"/> Structural (flat roof)	
<input type="checkbox"/> Other – please list _____	

SDHW System Information	
<input type="checkbox"/> System is certified to CSA 379	CSA 379 Certification No: _____
For systems that are not certified to CSA F379, check all that apply and supply support documents	
The system is:	
<input type="checkbox"/> 1. Not tested or certified as a packaged system;	
<input type="checkbox"/> 2. Certified to one of the following: <input type="checkbox"/> SRCC OG300; <input type="checkbox"/> Solar Keymark Certification No.: _____	
<input type="checkbox"/> 3. Tested (but not certified) to one of the following: <input type="checkbox"/> CSA F379; <input type="checkbox"/> SRCC OG300; <input type="checkbox"/> Solar Keymark	
<input type="checkbox"/> 5. Other (please provide details) _____	

Heat Transfer Loop Information	
Heat Transfer Fluid: <input type="checkbox"/> Water <input type="checkbox"/> Glycol <input type="checkbox"/> Other (specify): _____ <i>Please include spec sheet, instructions for use, and/or safety labels for the heat transfer fluid.</i>	If glycol, indicate dilution level: _____ % water, _____ % glycol
Size of solar water tank (litres):	Type of glycol used: _____
Volume of Heat Transfer Fluid (litres)	
Heat Exchanger Type (if applicable): <input type="checkbox"/> Internal (in tank) <input type="checkbox"/> External (stand alone) <input type="checkbox"/> Stainless steel <input type="checkbox"/> Copper <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single-walled <input type="checkbox"/> Double-walled

Collector Information			
Collector Manufacturer	Collector Name	Collector Type	Collector Type: 1. Glazed flat plate; 2. Evacuated tube; 3. Integrated Collector-Storage; 4. Concentrating; 5. Other
No. of Collectors	Collector Size - each (width x height) (m)	Amount of Heat Transfer Fluid per Collector (litres)	Total Weight per Collector when filled with Heat Transfer Fluid (kg)
<input type="checkbox"/> 1. Solar Collectors are not tested or certified; <input type="checkbox"/> 2. Solar Collectors are certified to one of the following: <input type="checkbox"/> CSA-F378; <input type="checkbox"/> SRCC OG100; <input type="checkbox"/> ISO 9806-1; <input type="checkbox"/> EN 12975-1,-2 Certification No.: _____ <input type="checkbox"/> 3. Tested (but not certified) to one of the following: <input type="checkbox"/> CSA-F378; <input type="checkbox"/> SRCC OG100; <input type="checkbox"/> ISO 9806-1; <input type="checkbox"/> EN 12975-1,-2 <input type="checkbox"/> 5. Other (please provide details) _____			

Drawings to Submit for Review	
<input type="checkbox"/>	A drawing or sketch of the system's plumbing layout showing all plumbing components identified above (if not CSA certified)
<input type="checkbox"/>	Drawings of rack and connection details to roof (sloped roof) (cross section and plan views)
<input type="checkbox"/>	Drawings of rack and connection details to roof (flat roof) (cross section and plan views)

Only Required if SDHW System is not CSA Certified					
Component (check all products being used)	Applicable Standard	Product Name and or Model Number	Certified to Standard?	CSA Certification Record Attached (see details below)	Specification Sheet Attached
<input type="checkbox"/> Solar Collectors	CSA F378		See above		<input type="checkbox"/>
<input type="checkbox"/> Pump	CSA C22.2 No.108		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Drain Valve	CSA B125		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	
<input type="checkbox"/> Pressure Relief Valve	CGA CAN1-4.4 or ANSI Z21.22		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	
<input type="checkbox"/> Differential thermostats	CSA C22.2 No.24		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	
<input type="checkbox"/> Storage Tanks	CSA C309		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Pressure & temperature relief valves	CGA CAN1-4.4 or ANSI Z21.22		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	
<input type="checkbox"/> Solenoid valves	CSA C22.2 No. 139		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	
<input type="checkbox"/> Plumbing Fittings	CSA B125		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	
<input type="checkbox"/> Vacuum breakers	CSA B64 Series		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	
<input type="checkbox"/> Controls	CSA C22.2 No 24		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Heat Exchanger	CSA F379 section 7.4.3		N/A		<input type="checkbox"/>
<input type="checkbox"/> Backflow preventer	CSA B64 Series Reduced Pressure Type		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	
<input type="checkbox"/> Expansion tank or Temperature Expansion Relief (TER) Valve	CSA		<input type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/>	

CSA Certified Product Listing

Two options in getting proof of CSA certification:

1. Obtain a copy of the certification record direct from the supplier
2. Go to the CSA Directory website (note not all products may be listed)

Website - <http://directories.csa-international.org/>

Choose Directory "Plumbing Products"
Input the company name - then search

The directory will show company and the different class of products that are approved.

Click on the company (supplier) and print out:

1. The Certification Record - this shows the actual model numbers that are CSA approved
2. The Class Description – this shows the CSA standard that the products are approved to.

Note you can also search class descriptions to find suppliers that are have certified products. Example:

CLASS NUMBER: 6917-01 **DESCRIPTION:** PLUMBING FIXTURES-Tank for Service Water Heaters