WINDOW AND DOOR SPECIFICATIONS Emergency Containers 2025 PROJECT 3 Communities, NT

Important: Window/door supplier, please carefully read the descriptions below so that you ensure proper product is sent to the community.

Windows:

This order is for a total of twenty-four (24) windows. (See below)

And

Exterior Doors: This order is for twelve (12) pre-hung exterior metal doors.

Windows and Doors will be supplied as follows:

Important:

For windows, an acceptable product will be manufactured by one of the following companies only:



For exterior pre-hung metal doors, an acceptable product will be manufactured to meet the specs that follow in this document.

Note: No substitutes will be accepted for either the door or window manufacturer.

Important: To be considered an acceptable product, for all windows being supplied for this tender, the window manufacturer's company name and model number of windows will be listed on BOTH the Canadian Standards Association (CSA) website database AND the Energy Star website; where all window model numbers, and related window performance data will be listed

showing ratings equal to or superior to the acceptable zone D Energy Star ratings, as specified in this document.

CSA Product Search: <u>https://www.csagroup.org/testing-certification/product-listing/?srsltid=AfmBOor-</u> lp Y0uUzgz0UMvMHmQXqqLc2RJXQ2H1cGL3cCLiTIX6s19H3

Energy Star Product Search: <u>ENERGY STAR Certified Windows, Doors & Skylights | EPA</u> <u>ENERGY STAR</u>

Note: At the time of the tender price submission, the supplier will submit with the tender price, a document containing all the following window and door information:

For Windows:

- Name of window manufacturer, for the windows being supplied.
- Model number of windows being supplied for each window category (casement, single hung and fixed, etc.).
- *Energy rating (ER) number for each window category.
- U-Factor rating for each window category.
- For each window category the air tightness rating, water tightness rating and wind load resistance rating.
- Type of Low E coating.
- Type and amount of gas fill (ie: which panes contain the argon gas, and which contain air or Krypton)

Doors:

- Name of door manufacturer.
- Model number for door and frame.
- U-factor rating.
- Thickness for the metal door faces.

*ER ratings will be for the entire window, frame, and glass, NOT the "center of glass" rating for the glass portion only.

Window Requirements:

Both fixed and operable windows to be in compliance with the CAN/CSA A440 and the CAN/CSA A440.2 standards and shall bear the following permanent markings, visible after installation, stamped, etched, or approved by CSA, a permanent label:

CSA Certification Mark



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Acceptable CSA Physical Performance Ratings for Windows:

All windows supplied will meet or exceed the following: Air tightness = A3 Water Tightness= BS Wind Load Resistance for Casement = C4 Wind Load Resistance for Single Hung = C3 Wind Load Resistance for Single Horizontal Slider= CS Wind Load Resistance for Fixed = CS Screen rating = S1 or greater.

Window Energy Performance and Energy Star:

All windows supplied will:

Be qualified by Energy Star Canada.

Have the Energy Star rating for Zone $D\!/$.

Have ER* ratings, or a combination of ER rating+ U-Factor, equal to or exceeding those ratings that are acceptable for zone D, as listed in the Energy Star table shown in this document.

ER value will be 34 or higher.

U-Factor will be 1.20 or lower.

Have the Energy Star label affixed to each window, showing the energy efficiency ER ratings, U-factor and identification of the applicable Canadian climate zone. Labels will conform to the NRCan fenestration labeling guidelines for energy star models.

Acceptable ER ratings for Zone D for Energy Star certified doors & windows.

		Compliance Paths					
	Heating	Energy Rating (ER)		U-Factor			
Zone	Degree-Day	Minimum ER (unitles.s)		Maximum	Minimum		
	Range	Maximum U-Factor 2.00		U-Facto,r	ER		
5		VV/m••K		VJ.f.rr:f: .15	(unitless)		
		(0.35 <u>Btu/h•ft.>•°F)</u>		(f:\tu/h•ft,'• -]			
Α	<= 3500	2.1	0-r	1.80 (0.32)	13		
В	> 3500 to<= 5500	25	o,r	1.60 (0.28-)	17		
С	> 5500 to<= 8000	2.9	o,r	1.40 (0.25)	21		
D	> 8000	34	o,r	1.20 (0.21)	25		
Doors							

i	Heating Zone Degree-Day Range		Energy Rating (ER) or Minimum ER (unitles:.s) Maximum U-Factor 2.00 W/m'-K (0.35 E3-tLJ/h. ft,." - D		U-IFactor Maximum Minimum U-Facto.r ER W.f.r.ri?f5. (unitle-ss) @LJ/h_ft,": - D	
	А	<= 3500	21	or	1.80 (0.32)	N/A
	В	> 3500 to <= 5500	25	or	1.6-0 (0.28)	N/A
	С	> 5500 to <= 8000	29	or	1.40 (0.25)	N/A
	D	> 8000	34	or	1.2.0 (0.21)	N/A

ENERGY STAR - Minimum qualification criteria for windows

Products that earn the ENERGY STAR are independently certified to save energy, save money and protect the climate. To qualify for ENERGY STAR certification, a window or door must meet a minimum Energy Rating (ER) or a maximum U-Factor value_

Minimum Energy Rating (ER)	or	Maximum U-Factor/Minimum ER
34	or	:5 O 21

Note: an ER of lower than 34 will not be accepted

a U-factor of greater than 21 will not be accepted



Additional window specifications:

- a) Windows will not have a nail flange.
- b) Windows will have integral brickmould
- c) White PVC or fiberglass jamb with drywall returns.
- d) Plastic or insulated windowpane spacers providing thermal break.
- e) Northern Low E coating appropriately placed to comply with Zone D (Arctic)
- f) All windows are to be ENERGY STAR rated for Zone D (Canadian Arctic).
- g) Argon filled. The word "Argon" should be clearly printed on the window spacer.
- h) Removable insect screens rated at minimum CSA rating of SI
- i) All windows listed on the drawings as being fixed WILL NOT be open-able.
- j) Windows will be supplied according to the sizes and categories listed in this document.
- k) Windows must be designed to allow on-site re-glazing.
- 1) Window frames/sashes will be white Vinyl or fiberglass.
- m) Window glazing will be triple, to achieve the appropriate zone D, ER value and U-factor for each category of window.
- n) All windows come with a removable insect screen.
- o) Each window will also come with four pieces of, cut to length to match the window dimensions, white ³/₄" x 8" wide PVC covered wood jamb extensions. These jamb extensions will be detachable from the window to accommodate ripping to width on site. The four pieces of PVC jamb extension will be shipped taped to each window. Note: Jamb extensions thickness will fit the return on the window.

Note: Windows arriving without bearing the labels proving authenticity as described above will be shipped back to supplier, at the supplier's expense.

Note: All window sizes listed in this document pertain to **the rough stud opening**, not the window box or not to the outer edge of brick moulding/nailing flange. If further clarification is needed, please consult with the Procurement department for clarification. These window specifications, however, will supersede all discussions.

Note: Windows listed in this document which are classified as FIRE EGRESS will have a minimum unobstructed opening not to be less than .35 square meter, or 3.76 square feet to comply with the Canadian Fire Code egress size. Single hung windows will not have stoppers designed that disallow the window from opening far enough to achieve the appropriate egress sized unobstructed opening.

Note: For any fire egress code compliant window being ordered, the supplier will contact Procurement to discuss an alternate window configuration or dimension, should the window being specified in this document not meet the fire code.

Exterior Doors:

Door Specifications:

- A) Six panel steel entry door system (dimensions and door swings are listed on spreadsheet).
- B) Comes with **PVC covered jamb and brick-mold**.
- C) Combination of aluminum/wood for sill/threshold construction.
- D) Chrome or brass rust proof hinge and rust proof hinge pins
- E) Door **<u>comes pre-hung</u>**, completely assembled with weather stripping in place, ready to install.
- F) Each door will be supplied, pre-bored and reinforced, 1 hole, ready for a door knob and 1 hole for a deadbolt.
- G) Important: The doorknob & deadbolt will be predrilled for 2 3/4" back set only,
- H) Metal door is factory primed 2 coats minimum.
- I) Door has high density polyurethane foam insulation or poly styrene core or better.
- J) Heavy duty doors will have a minimum of 24-gauge steel skin construction.
- K) Door face material: galvanized steel shall comply with ASTM A 653 and A 924
- L) Hinge reinforcements: 20 gauge or better.
- M) Doors and jambs will be CSA Canada compliant.
- N) Doors will be energy efficient and qualified by Energy Star Canada and will:
 - Have the Energy Star label affixed to each door, showing the energy efficiency data.
 - Have the Energy Star rating for Zone D (Canadian Arctic).
 - Have ER* ratings which equal or exceed those listed in the Energy Star table shown in this document.
 - Supplier will include at the time of tender, documentation to support the rating of the doors being supplied. Document will include such information as name of manufacturer, description of door, model number and ER value.

0) <u>Magnetic weather strip will not be acceptable</u>. Only white vinyl coated foam weather strip will be acceptable or better. See illustration below.

P) Weather tight door sweep comes installed on each pre-hung door.

Q) Metal door will be white in colour and minimum of $1\frac{3}{4}$ " thick.

R) Wood frames will be for a 2" x 4" and 2" x 6" wall thickness (see exact wall thicknesses below) and are to be factory standard finger joint and be a single rabbet jamb design. Hinge jamb, strike jamb and head jamb shall be machined to accept a kerf applied weather seal S) Deadbolt hole will be pre-bored and 2 ³/₄" backset.

For all Windows and Doors: To ensure crates are easily identified for transport to the correct locations within the community, all window and door crates will be clearly and legibly labeled with dimensions for all the window and door sizes/swings contained within the crate. Do not <u>mix windows with doors in the same crates</u>. Doors will be shipped in crates with doors only packed inside the crates. Windows will be shipped in crates with windows only packed inside the supplier does not comply with these instructions, the cost to unsort items will be back charged to the supplier.

QTY	R.O. SIZE	LOCATION
6	28" w x 47 1/2" h	Casement Egress, LHC
6	32" w x 39" h	Casement Egress, RHC
6	35" w x 35" h	Casement Egress, LHC
6	40" w x 40" h	Casement Egress, LHC/F
0		
0		
0		
0		
0		
0		
24	TOTAL WINDOWS	

Breakdown of Window Sizes to be supplied.

Window sizes and configurations are as follows:

ALL windows will comply with the Canadian fire code egress size opening

Bedroom Egress LHC

ZERO (0) windows:

28" w x 45 " h - FIRE EGRESS



Bedroom Egress LHC
Six (6) windows:
28" w x 47-1/2" h - FIRE EGRESS

Bedroom Egress Windows



Bedroom Egress RHC

<mark>Six (6) windows:</mark>

32" w x 39" h - FIRE EGRESS





Bedroom Egress LHC	ĺ
Six (6) window:	
35" w x 35" h - FIRE EGRESS	

Bedroom Egress Windows



Bedroom Egress LHC/F

Six(6) window:

40" w x 40" h - FIRE EGRESS

Bedroom Egress Windows







Exterior Insulated Sewage Tank

Dual Electric Heat Trace

504 Imperial Gallon Usable Capacity Insulated Sewage Holding Tank for Outside insulation.

- 1. Sewage holding tank useable capacity shall be 504 imperial gallons to dimensions as per drawing MD-5 (as per current issue) which forms part of this specification.
- Tank outer shell to be of either fiberglass construction, minimum thickness 1/8", or HTS 7087techliner coating produced by Hesterman Technical Services Company, Calgary, Alberta PH: 403-222-0655
- 3. Tank inner liner shall be of fiberglass construction. Minimum thickness 3/16" complete with non-corrosion liner or Derakane 411-45 coating.
- 4. Insulation to be closed cell polyurethane with minimum 4" thickness between inner and outer shells.
- 5. Inlet and outlet pipes shall be Schedule 40 PVC pipe with FRP wrapping. The ends of both inlet and outlet pipes shall be bare for field application of fitting by others. All inlet ends shall be terminated by factory supplied and installed insulated plugs. The plug insulation thermal resistance must be approximately equal to the thermal resistance of the tank walls. Inlet and outlet pipes to be located and sized as show on sewage tank drawing. Pump out connection to extend inside the tank as per contract drawing details. The plugs will be bonded to inlets by PVC cement on site of the inlets are not used.
- 6. Tank outer shell shall have minimum 3" deep continuous length ribs on bottom of tank as shown on sewage tank drawing.
- 7. Access hatch shall be insulated with minimum clear opening into tank of 2'-0". Hatch shall be secured to tank with ¼" stainless steel course thread bolts. Hatch to tank shall be provided with pre-moulded gasket to entire perimeter to hatch to tank connection. Hatch to be minimum 1/8" FRP construction with corrosion liner to all surfaces exposed to interior of tank. Make the hatch opening childproof
- 8. Electrical junction boxes shall be of weatherproof construction complete with removable stainless steel course thread bolts and gasket. Junction boxes shall be bonded integral to tank. Junction boxes to be complete with ½" hubs and plugs.
- 9. Heat trace to be controlled by a weatherproof temperature controller complete with remote temperature sensing bulb. Locate sensing bulb in liquid at the bottom of the tank at 2'-0" from pump-out pipe. Install temperature controller injunction box. Heat trace to be self-regulating type. Heat trace active length of the bottom of the tank only, bonded to the underside of the interior FRP liner and installed complete with metallic tape and hundred percent separate stand by length. Lay out heat trace on the bottom of tank to ensure freeze protection of entire tank. Heat trace system should be fully wired, terminating at electrical junction box. Heat trace

system shall operate on 120-volt single phase and be properly sixed for a single pole, 15-amp, ground fault interrupt type breaker and #14 AWG wire. Heat trace shall be tested at the factory prior to shipment. Perform megger testing of heat trace as per manufacturer's specification. Standard of Acceptance: For complete system design and requirements:

- 10. Tank is to bear manufacturer's name, address and date of manufacture.
- 11. Construction to confirm the following standards:
 - CGSB-GP22 Sections 4.5.3., 4.5.4., 4.5.5., 4.5.6.
 - CANS3-B66-M79 Sections 3.1.1., 3.1.2., 3.1.3., 3.1.5.2., 3.1.5.3., 3.3.1., 3.3.3., 6.2.1., 6.2.2., 6.2.3., 6.3.4., 6.3.5., 6.3.6., 6.3.7., 6.3.8., 8.1., 8.2.1.1.
- 12. Material and Workmanship Warranty: Tank and all integral components are to be warranted for 2 years against materials defects and faulty workmanship commencing from date of building occupancy.
- 13. Performance Warranty: Tank is designed to contain normal household wastewater and sewage and provide watertight seal against 12" head of water column and a negative pressure of 1 P.S.I. showing no signs of leakage, deformation or surface cracking of both inner and outer shells. Thank must also withstand pressures induced from emptying by community sewage pump out truck with no visible deformation or rupture. Tank to maintain contents at +40 degrees F. with the outside temperature of -65 degrees F.
- 14. Shop Drawings:
 - Must indicate all thickness, weight, tapping fittings and access cover layout and positive and negative pressures which tank can withhold, tank size structural reinforcements, name of tank materials.
 - Manufacturer to submit detailed, engineer stamped shop drawings and tank installation and maintenance instructions for review. These instructions must include specifications for drilling holes in tank.
- 15. Unused Sewage Tank Inlets shall be bonded by insulated plugs supplied by the tank manufacturer. Use PVC/ABS cement for bonding.
- 16. The tank manufacturer must provide the sewage tank installation and maintenance instructions. The instructions to be attached to the tank.
- 17. The tank inside and outside surfaces coating materials shall have minimum service life of 25 years.

CRATE Size: 82 × LOIX 48"H.



SJE PUMPMASTER® LUPS FLOAT SLUITCH

Mechanically-Activated, Wide-Angle Switch for Use in Potable Water Applications

The SJE PumpMaster[®] WPS mechanically-activated, wide-angle pump switch is designed for direct control of pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC or control applications as low as 120 VAC, 100mA for:

- potable water applications
- water applications

It can be wired to work in either pump down (normally open) or pump up (normally closed) applications.

The SJE PumpMaster[®] WPS float switch is not sensitive to rotation or turbulence allowing it to be used in both calm and turbulent applications.

FEATURES

- Can be wired to work in either pump down (normally open) or pump up (normally closed) applications (Single Pole, Double Throw)
- Heavy-duty contacts
- Controls pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC or control applications as low as 120 VAC, 100 mA
- · For direct wiring applications
- Adjustable pumping range of 7 to 36 inches (18 to 91 cm)
- · Includes external cable weight and boxed packaging
- CSA Certified to meet NSF/ANSI 61 standard for use in potable water; approved for use in tanks of 250 US gallons (950L) in volume or greater per float







SJE PUMPMASTER® WPS PUMP SWITCH - Mechanically activated, wide angle float switch designed for use in potable water applications.

Part #	Description	Shipping Weight
1047427	15PMWPSWE	3.3 lbs.
1053697	30PMWPSWE	5.1 lbs.

WE = Weighted Externally

Can be wired to work in either pump down (normally open) or pump up (normally closed) applications (Single Pole, Double Throw).

EXTERNAL WEIGHT is standard.

PACKAGING: Boxed - standard

SPECIFICATIONS

CABLE: Flexible 16 gauge, 3 conductor (UL, CSA) SJOW, water-resistant (CPE)

FLOAT: 3.05 inch diameter x 3.56 inch long (7.75 x 9.04 cm) high impact, corrosion resistant, PVC housing for use in potable water and water up to 140°F (60°C) ELECTRICAL: 120/230 VAC 50/60 Hz, 13 FLA, 85 LRA

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

Minimum Electrical Load: 120 VAC, 100 mA

NOTE: This switch is not intended to control non-arcing loads.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying applications.

PUMP UP is normally closed contacts for filling applications.

